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EDUCATIONAL SURVEY

OF THE

HAVRE HIGH SCHOOL

Havre, Montana

by

Henry L. Zahn

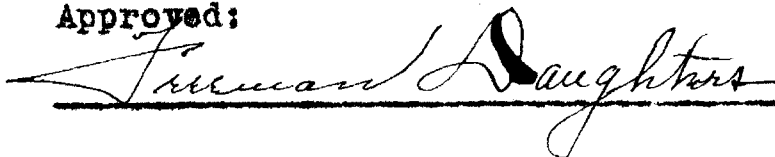
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B. S., Jamestown College, North Dakota, 1928

Presented in partial fulfillment of  
the requirement for the degree  
of Master of Arts.

State University of Montana  
1937

Approved:



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Chairman of Board  
of Examiners.



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Chairman of the Committee  
on Graduate Study.

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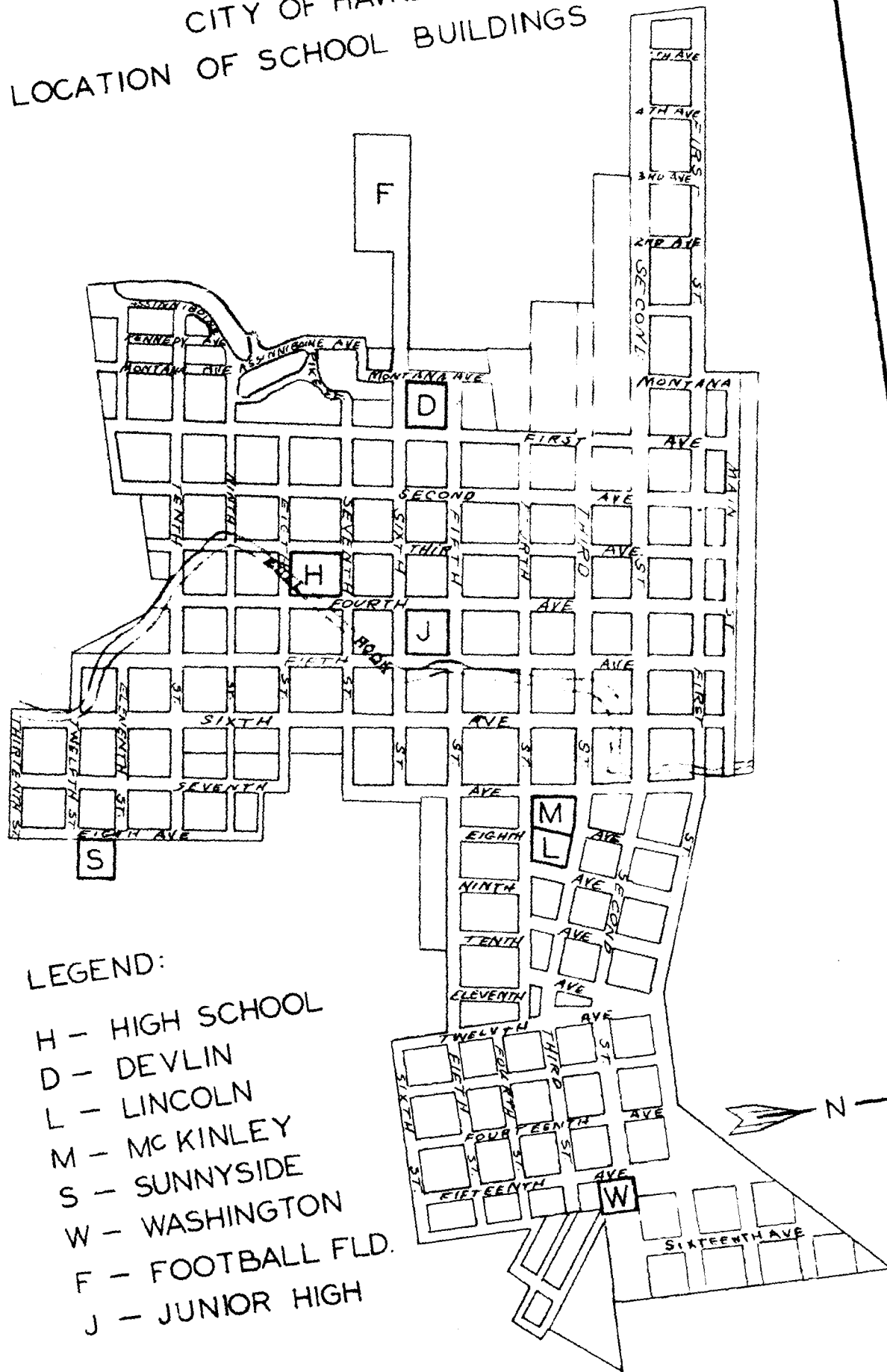
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# CITY OF HAVRE LOCATION OF SCHOOL BUILDINGS



# EDUCATIONAL SURVEY OF THE HAVRE HIGH SCHOOL

## CHAPTER I

### Introduction

In conducting this survey of the Havre High School, which is of a general and comprehensive nature, the author has attempted to give a true and factual picture of existing conditions in order that conclusions may be drawn from the data presented and that recommendations may be made wherever feasible.

The schools in Havre School District No. 16 consist of five rural elementary schools, five city elementary schools, a parochial preparatory school, a grammar grade school and a senior high school. All these schools are located in the Havre community of which the city of Havre forms the center. The population of Havre is 7,500 and it is the county seat of Hill County which is located upon the main line of the Great Northern Railroad in the North Central part of the state. Besides being the division point for the Great Northern, Havre forms the center of a large agricultural section.

In this survey the author has secured information from the records of the county Superintendent's office which dates back to 1912, at which time Hill County was created from a portion of Chouteau County. Other data concerning the history of the schools and the community were secured from old files and by personal interviews with early residents, especially the president of Havre's first school board. The data

gathered for the chapters entitled, "A History of the Havre Schools", and "The Social and Economic History of Havre" were collected by Superintendent Shirley and the author. Superintendent Shirley, in his thesis "An Educational Survey of the Havre Elementary Schools", will not summarize the above data which is given in more detail in this thesis. Since this data pertains to both the elementary and the high schools it serves as a background for the present educational program.

James Holland Sr. also supplied many interesting details of schools affairs which he came into contact with during his many years of service (from 1908 to 1920). He served as chairman of the board for seven years. Several of Havre's first teachers, who still reside in the city, also contributed items of valuable history. Principal among these was Mrs. Lee Jones, who taught in the local schools from 1894 to 1903.

Standardized tests and score cards were used in securing the intelligence quotients, achievement scores, teacher and building ratings for the high school. "The Henmon-Nelson Test of Mental Ability" and the "Terman Group Tests" were given to all high school students. "The Sones-Harry High School Achievement" Test, Form A, was given to all juniors and seniors. Comparisons were made with the results of the tests given in Havre to the national norms for these tests. No comparisons were made with any other schools in the state since there is a lack of absolute

standards among schools and therefore the value of such comparisons would serve only in a general way.

A study of the social and economic background was made of the community, through questionnaires sent to all students' homes, in order that proper conclusions could be drawn and that sound recommendations could be made for the administration of the Havre Schools.

Whenever there has been any definite trend in any phase of this survey, the author has attempted to predict the future trends; and has included in his recommendations, which appear at the end of each topic, definite suggestions which, if followed will tend to avoid mistakes of the past and in this way offer a more efficient and up-to-date school system to the citizens of the district.

Before beginning a survey of a school system one must be familiar with the purposes and the technique involved in conducting such a survey. The school survey, in its present form, is a relatively new process for evaluating the efficiency of a school system, though it is obviously an expression of an early practice.<sup>1</sup> The term survey was borrowed from the field of sociology and has been used to describe the process by which we may evaluate the efficiency of the school under consideration. In general the term has been applied to the careful factual studies of educational

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1. Wells, Guy F. - The First School Survey; Educational Review, Vol. 50 p. 106 September 1915.



conditions and results, with constructive criticisms of the findings. Two main forces have been responsible for the development of the survey movement. One of these is economic, the other scientific.

According to Sears the survey is a reasonably scientific determination of aim and procedure; followed by a critical evaluation of results obtained; together with an interpretation of these results for future policies.<sup>2</sup> Sears lists the functions of a survey as twofold: first, as an aid in the formulation of school policy and second, as an aid in evaluating results.<sup>3</sup>

One must have a definite purpose in conducting a survey and the objectives must be clear. The purpose may be general or very specific, it may be comprehensive or very narrow. The purpose of this survey was very general in that all phases of the High School were considered. The aims of a survey will necessarily grow out of the needs of the school. It was the desire of the School Board to have a survey made of the school so that the facts could be presented to the community.

Once the objectives are determined a plan for carrying out the necessary phases of the survey must be prepared. This was done, as previously stated, in the thesis writing class after carefully studying numerous current books dealing with the techniques involved.

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2. Sears, James B. - The School Survey; Houghton Mifflin Co., 1925. p. 8

3. Ibid. p. 10.

After completing the plans in outline form the data were gathered and the following principles, as given by Sears, were adhered to.<sup>4</sup>

1. No data should be collected which does not pertain to the survey.
2. All sides of the facts gathered should be considered.
3. The forms for getting the data should be so constructed as to be economical of time and to make for ease in handling the tabulations.
4. Facts should be distinguished from opinions.
5. Sampling should be representative.
6. Comparative methods should be used only when sufficient basis for comparison exists.
7. After gathering the data interpretations should be carefully made and the findings should be recorded in an unbiased manner.

In conducting the survey of the Havre High School an honest attempt was made to follow approved practices, to stick to the outline, to gather sufficient data, to interpret the findings impartially and, on the basis of the findings, to offer constructive criticisms which will aid in producing a more efficient school.

In preparation for conducting this survey an outline was made under the direction of Dean Daughters with the assistance and criticisms of the entire class in thesis

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See 4. Sears, James B. The School Survey; Houghton Mifflin Co., 1925. page 15-16.

writing during the summer of 1936. A careful study was made of current school surveys made under the direction of experts in this field. Some of the surveys studied were those of the St. Louis schools, the Maple Heights, Ohio, schools, and Evansville, Indiana, schools. These surveys were selected because they represented "types" and because they were all comparatively recent. Many studies of a similar nature, made within the state, were studied during the summer and winter of 1936.

In conducting a school survey several steps are essential. Sears lists four such steps as follows: First, to determine what kind of an educational policy is needed in the particular community; second, the financial capacity of the community to fulfill these needs; third, the extent to which the present system satisfies the proper needs; and, fourth, what constructive proposals are desirable to bring the schools up to the standards that the community can afford.<sup>5</sup>

Keeping these steps in mind will serve as a constant check and will tend to prevent one from confusing the actual conditions with what they should be. It also tends to keep recommendations within reach of the needs and the capacity for meeting these needs.

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5. Sears, James, B. The School Survey, Houghton Mifflin Co., 1925.

## A HISTORY OF THE HAVRE SCHOOLS.

### CHAPTER II

#### Introduction

In order to give a background to our present school system a brief history of the Havre School District No. 16, from its very beginning up to the year, is being presented. In presenting a true history of the local schools the growth and progress has been traced from their infancy, through their struggles of early years, and finally up to their present position as one of the outstanding systems of the state. Data for this survey were gathered from all available sources. Facts as to growth, finances, personnel and problems peculiar to the district were obtained from the minutes of the meetings of the board of trustees, which date back to the first regular organized meeting held on December 16, 1893. It will be remembered that Havre had its beginning with the erection of a tent store on old "Bull Hook" in 1891. From old newspaper files data were gathered concerning the schools. These articles were written by people who were among Havre's earliest settlers who had an active part in school affairs and who have since passed on. By personal interview with some of the remaining early settlers many reminiscences were gathered which helped to piece the story together.

Among those interviewed were L. K. "Daddy" Devlin, who came to this locality before there were any settlers in the

valley and when buffalo still roamed, in large numbers, over the flat which is the present site of Havre. L. K. Devlin was employed by the contractors who came West to erect Fort Assiniboine. Later he was given a contract to supply the fort with beef and this venture led him to establish the first meat market in the then small prairie town of Havre. Devlin was almost immediately drafted for services on the school board. He was elected chairman of the board, which position he held for fifteen years (from 1898 to 1913). Mrs. Jones started teaching in Havre's first regular school building. She was then known as Mrs. C. J. Callous, the wife of a Great Northern switchman.

#### Havre's First School

The first school in Havre was held upstairs over the Gen Restaurant, which was located about <sup>a</sup> block north of the present site of Buttrey's Store. It was situated on the west side of the street. There were only a few pupils, and the schoolroom supplies were very crude. In 1893 the school was moved to the new Methodist Church, which was still in the course of construction as they didn't have enough money to complete it at that time. The church was a mere shell that winter; but by the aid of a big stove and lots of coal and wood, the pupils managed to keep from freezing until spring. This church was located where the Assiniboine apartments now stand.

Tom J. Pyle was the teacher for the first term from September 1893, to February 1894; he received \$70.00 a month for conducting the school. He was also the first principal of the Havre schools. This title, and later that of professor were used for a number of years to designate the head of the school corresponding to the position of the present superintendent. There were 25 to 30 pupils, ranging from those in the beginners Chart Class to the fifth-reader class. There were no grades, and pupils were separated into classes according to their skill in mastering McGuffey's Readers. The ages of those using the fifth readers ranged from 10 to 17 years. Only plain facts were taught, and the only beauty which they received had to be gained from the inspiring poems and bits of classics found in the Readers and in the old Harvey's Grammar. The teacher usually had little time to add to the child's knowledge of the outside world; and had he found time, he probably would have been too tired to furnish any inspiration to his charges. Other text books used were Barnes History, Fish's Arithmetic, Rand and McNally's Geography, Babcock's Speller, and Steele's Physiology.

### The First School Building

To take care of its rapidly growing school population, due to the influx of railroad families, the Board of Trustees decided that a school must be built. To accomplish this they

needed funds, so they decided to float a \$5000 bond issue in the spring of 1893.<sup>6</sup> The bonds were rejected by the would-be purchasers on the grounds of insufficient valuation of the district. This condition was to hamper the growth of the schools for many years to come. In February, 1894, the bonds were sold and work was started upon a four-room brick veneer building.<sup>7</sup> This was the old Washington building, which was located across from the Methodist Church on the northwest corner of 1st Avenue and 3rd Street. There was considerable controversy over the building of such a large school, as it was said to be much larger than would be needed for many years. The playground was Gus DeCelle's pasture where the children gathered flowers, and romped in the spring and fall, and coasted down hill during the winter months.

In the spring of 1894 Edyth Blackstone was engaged as teacher at a salary of \$70. She succeeded Mr. Pyle, who left at the end of the first term. It seems that at that time the school year was divided into two terms of five months each, with the election of teachers at the end of each term. This was partly due to the rapid growth of the schools, which necessitated the addition of a teacher each term.<sup>8</sup>

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6. Minutes of the Meetings of the Board of Education, Havre School District No. 16. Book 1, February Meeting, 1893.

7. Ibid. - February Meeting, 1894.

8. Ibid. - May Meeting, 1894.

### A Two-Teacher School

Mrs. C. J. Gallus was added to the staff in 1894 to assist Miss Blackstone, and started at a salary of \$50 a month. The first salary cut was given in 1894, due to a lack of finances. The principal's salary was cut to \$55 and her assistant's to \$45 a month. In January of 1895 a motion was made at a board meeting for the clerk to run an advertisement in the Helena Independent for a male teacher for the Havre schools.<sup>9</sup> Herman Reid was elected principal in February, 1895, at a salary of \$65; but only remained in the system until June of the same year.<sup>10</sup> Mrs. C. J. Gallus continued to teach the lower grades, which position she held until February, 1903. In the fall of 1895 C. W. Drake became "professor"; and, after teaching for two months, handed in his resignation, but was told he had to finish his term. He was, however, released in November and was offered the position as janitor at \$20 per month, which he apparently did not accept.<sup>11</sup> In January of 1896 a Mr. L. T. Morgan was selected to fill the vacancy. His stay was also a rather short one, as he taught only till the end of the second term in June of 1897. He, however, was more fortunate financially, as he received \$90 per month for his dual position as "professor" and teacher. He was the first teacher who seemed

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9. Minutes of the Meetings of the Board of Education, Havre School District No. 16. Book I, January Meeting, 1895.

10. Ibid. February Meeting, 1895.

11. Ibid. October Meeting, 1895.



to have any educational background. He introduced Reed and Kellogg's Language books, and supplemented his lessons with information about the outside world. This information was new and inspiring to those who at that time were dependent upon their text books and local newspaper for their learning and culture.<sup>12</sup>

McGuffey's Fifth and Sixth Readers were added, and each year a few were "promoted" to these readers. The ease and understanding with which one read these readers was the test by which he entered the sixth or seventh grade. In 1898 a third teacher was added, a Miss Leone Talbot, to teach the primary grades at \$50 per month.<sup>13</sup> Up to this time only the plain facts were taught, as the overworked teachers had little time to polish up the recitations. Now that the staff was increased to three, "frills" were added. More individual attention was given the pupils, and the curriculum was enlarged. On Friday afternoons "pieces" were spoken and songs were sung. There was never any singing during the first years of the school, and it has been suggested that the main reason may have been because most of the teachers were men. In 1900 the fourth teacher, a Miss L. E. Lepper, the present Mrs. L. K. Devlin, was added at a salary of \$65 per month.<sup>14</sup> Mrs. Devlin states that the rooms were very crowded with from 65

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12. Letter: From Mrs. Lee Jones, Havre.

13. Minutes of May Meeting 1898.

14. Recollections, Mrs. L. K. Devlin, Havre.

to 85 in a room, and only seats for half this number.

Mr. Nelson C. Wescott, who was superintendent from 1897 to January of 1903, was the first teacher to receive a starting salary of \$100 per month.<sup>15</sup> Mr. Devlin states that Havre was always in the lead as to the amount paid their teachers. Fort Benton and Great Falls paid lower wages. Apparently Superintendent Wescott found time to engage in other business besides that of the school. According to the board, as charged in the minutes of Nov. 18, 1902, he was accused by the local newspaper, the Plaindealer, of engaging in outside business and thus neglecting his school duties. This led to his dismissal in January, 1903.<sup>16</sup> He was followed by "Professor" T. J. Troy, who was superintendent of the local school for ten years. He started at a salary of \$120 a month, and in 1911 received \$2000 per year.<sup>17</sup> Superintendent Troy was the third regular superintendent; and, prior to taking charge of the schools, he was a road supervisor. Harriet Markel, the present Mrs. F. F. Bassuot, came to Havre on March 6, 1903, as a teacher. She describes it as a "wild and woolly" hovel town. Her first day of teaching she was faced with 65 children and only 45 seats. She later organized the first girls' basketball team in the local schools. Mr. Bassuot was the architect for most of Havre's school buildings.<sup>18</sup>

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15. Minutes of May Meeting, 1897.

16. Ibid. - November 18, Meeting, 1902.

17. Ibid. - January Meeting, 1903.

18. Recollections: Mrs. F. F. Bassuot, Havre.

In ~~September~~, 1902, the board decided an auxiliary teacher was to be hired at \$75 per month to assist the present staff of teachers until other arrangements could be made for a room. A Miss Rose Lepper was secured for this position, and a primary room was secured by renting a building from Broadwater, Pepin and Company for \$15 a month. This building was located near the Liberty Hotel.<sup>19</sup>

### The McKinley School

In 1903 a new school, a four-room frame building, was built in East Havre; and again the board was criticized for building such a large school. The patrons had forgotten that the school built in 1894 was already too small, and that Havre was growing by leaps and bounds. Bonds were issued for the erection of the building and for the purchase of a lot. The school lot alone cost \$1200, an enormous amount considering the current price of land.<sup>20</sup> In January of 1904 the third room of the new school was furnished and occupied. New texts had to be provided by the district to care for the needs of the room.<sup>21</sup>

### Free Texts and a Library

On April 3, 1897, the matter of free text books was voted upon and passed by the people of the district. The first

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19. Minutes of September 7, Meeting 1902.

20. Ibid, February Meeting, 1894.

21. Ibid, January Meeting, 1904.

outlay for books was \$350.<sup>22</sup> The library was also started in 1897, mainly by the efforts of "Professor" Morgan; he sponsored a dance which brought a sum of \$77.77. The first appropriation from the state for a library was received in 1896 in the amount of \$50.<sup>23</sup> Two orders for library books were given in 1897-- the first for \$29.95 and the second for \$44.55. In the year 1896 a levy of 1½ mills was voted by the people to create a sinking fund. In 1903 free text books were again voted and passed by the people of the district.

#### Washington School Ruined By Wind

A heavy wind-and-hail storm during the summer of 1906 caused considerable damage to the new school.<sup>24</sup> The growth of the thriving city of Havre was again brought to the attention of the Board of Trustees in the fall of 1911, when it was found that there were children enrolled who could not be cared for with existing facilities. To help solve this problem a dwelling was rented from Rittenhouse Stringfellow, for \$25 a month, in the east end of the city.<sup>25</sup> This building was remodeled by Mr. Stringfellow, and rented to the board for a period of 21 months. Another fire, which burned the west-side school on March 14, 1912, helped to complicate the matter of handling the school housing problem. School was now held in double shifts--from 8 to 12:30 with the east

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22. Minutes April 10, Meeting, 1897.

23. Ibid. - January Meeting, 1896.

24. Ibid. - July Meeting, 1906.

25. Ibid. - August 22, Meeting 1911.

school teachers in charge, and from 12:30 to 5 with the west side school faculty on duty. In this manner the lack of available buildings was not felt so severely.<sup>26</sup>

In April of 1912 the city council voted to give the schools free water for school purposes. With the voting of another bond issue by the people of the district, a contract with Lease and Richards of Great Falls was entered into for the construction of a west-side school. The successful bid for the new school was \$11,091. The present site of the Devlin school was selected with a view to growth of the city. A block of land for this building was purchased from Gus DeCelles for \$5500.<sup>27</sup> Shortly after the purchase of the site Gus DeCelles presented the board with a gift for \$200; this came in very handy because the treasury was, as usual, in dire straits. The new school was named Devlin after Mr. L. K. Devlin, the chairman of the board, in honor of his many years of service to the schools of Havre.

Again in the fall of 1913, the crowded conditions of the primary grades forced the school authorities to put them on a half-day schedule. In 1915 the Episcopal Church was used to care for the overflow. In 1916 the Methodist church was used, and gas was installed for heating purposes in the regular school buildings.

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26. Minutes March 15, Meeting, 1912.

27. Ibid. - April Meeting, 1912.

## School District No. 16

The original boundaries of school district No. 16, which was located in Choteau County, extended north to the Canadian boundary line and south to the military reservation's southern boundary. The school district has grown steadily smaller, due to the coming of new home seekers who have enough children to demand a school for themselves. New districts were formed as soon as they had the necessary number of voters and sufficient valuation. Poor transportation facilities were mainly responsible for redistricting the original area, which was as large in extent as many counties are today.

The first division was made when district No. 25 was established in 1897.<sup>28</sup> This district is located in the northern part of the county, with Miller School as its community center. In 1898 the school census had reached the total of 1074. During this year the district was again reduced in size, due to the formation of another district. In 1901 the district had an assessed valuation of only \$452,602.<sup>29</sup> This valuation was due mainly to the railroad, which runs the entire width of the county, as very little of the land was settled at that time and belonged to either the national government or the county. At this time a lack of finances forced the school board to register their warrants, which were cashed by the banks at ten per cent. discount.

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28. Minutes September Meeting, 1897.

29. Annual report of the County Superintendent of Schools July, 1901.

In 1904 the district employed its first truant officer at a salary of \$15 per month.<sup>30</sup> This position was usually given to the local chief of police, who held the position until 1911. During this year the janitors were given the position for an additional \$5 per month. By 1909 the district had grown to such an extent that there were 453 pupils in the grades, and by 1910 this figure reached 528. The total school census showed 1147 children in the district between the ages of 6 and 21, and in the fall of 1911 this number had reached 1258.<sup>31</sup>

The first school publicity was a pamphlet which the board desired to have sent to all families in the district. This pamphlet described the subjects offered, the number of teachers employed, the cost of running the schools, and other items of interest. The cost of running the schools of district No. 16 for the year dating from Dec. 1, 1910 to Dec. 1, 1911 was \$25,240.16.<sup>32</sup>

In December of 1912 the district boundary line on the north was moved southward again by the formation of another district. The boundary was to be set at the river, and the board raised little objection as the railroad was located south of the river. In the fall of 1917 a school was opened at Loredo, and a principal was employed for \$95 per month.<sup>33</sup>

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30. Minutes of September 10, Meeting 1904.

31. Ibid. - September Meeting, 1911.

32. Ibid. - December 18, 1911.

33. Ibid. - September Meeting, 1917.

During the year of 1918 many changes were made in dealing with the affairs of the schools of the districts. Most of these changes can be traced to war-time conditions. Some of the incidents which affected the schools were the employing of military training instructors and the introduction of military training in the high school. A budget system was used in all school purchasing for the first time. German was dropped from the curriculum in the middle of the term, and all pupils were given full credit. It was at this time, too, that the 70-foot steel flag pole was donated to the district by the Elks Lodge.

#### Early School Janitors

No history of the school would be complete without a word about the handy man of the school, the janitor. During the winter of 1894 a janitor was employed for the sum of \$25 a month, which salary was reduced to \$15 during the spring and fall months. At this salary one could not very well make a living for himself and family, so other work had to be engaged in by the janitors. This was not a very satisfactory arrangement, but salaries were slow in rising. By 1900 they received \$30 per month; in 1902, \$50 for caring for both buildings. This rose to \$55 in 1907, and to \$65 the following year. In 1908 two men were employed; and among their various duties was that of truant officer, and on such occasions as Hallowe'en they had to guard the school property,



for which services they received \$3 extra per night.<sup>34</sup> The big event of the year 1909 for the janitors was the introduction of dustless oil floor brushes. Salaries rose steadily, and by December 1st of 1910, the janitors were receiving \$90 per month. The state passed a regulation that thereafter the janitor had to be a licensed engineer. Because some of the janitors employed assumed duties not delegated to them, the board asked Superintendent Abbott to draw up a set of regulations, which was adopted by them in 1913.<sup>35</sup> At the present time there are nine janitors employed in the city schools.

### The First High School

Havre High School had its humble beginning in the fall of 1902. According to the minutes of a meeting of the board of trustees on August 25, 1902, the following motion was made:

"On motion the principal was authorized to establish a high-school course as outlined in his report, to modify it to suit conditions; and confer with the chairman of the committee on teachers and discipline, in regard to courses, text books, rules, and books pertaining to teaching higher branches.

"On motion the principal was instructed to furnish the clerk a list of seats required - same to be ordered at once."

No mention was made in the minutes of what subjects were to be taught. Mrs. A. W. Kapernick, who resides in Havre at the present time, had a sister, Imogene Allen, in the first

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34. Minutes October Meeting 1908.

35. Ibid. - August Meeting, 1913.

graduating class in 1907. The other member of this class was a Miss Lillian Hammond. The former Miss Allen is now a Mrs. W. R. Taft, and Miss Hammond is now Mrs. H. Tregoning. The second graduating class had eight members, and the third had fifteen. Mrs. Kapernick was graduated in a class of eight in the spring of 1912. At that time there were only two high school teachers and the principal. Other members in this class of eight girls were the present Mrs. G. R. Haglund and Mrs. Carrie Jones. The entire enrollment of the high school in 1912 had reached 40.

The high school was held upstairs in the old McKinley building, under very crowded conditions. The commercial department had to have its typewriters placed out in the halls along the walls. In August of 1907, a committee of Free County High School patrons asked the board for rooms in the east-side building for a county high school.<sup>36</sup>

#### The First High School Building

The present site of the high school, a tract 300 feet square was bought from Gus De Celles for \$3,000. The contract to construct the first regular high school building in Havre was awarded to E. Winegard of Minneapolis for \$14,731.<sup>37</sup>

In 1908 the Havre High School was removed from the accredited list of schools by the state board. This action by

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36. Minutes August 7, 1907.

37. Minutes of February meeting, 1908.

the state board was based upon the report of the state examiner which showed a deficiency in laboratory equipment. The board appointed a committee of three, composed of chairman Devlin, Superintendent Troy, and County Attorney R. E. Hammond to meet with the State Board at Helena in regard to the matter. Upon their arrival they found that the State Board had adjourned and that the members had left for their respective homes. After the usual amount of "buck passing" by the state officials, the committee returned home with a promise that the matter would be taken up as soon as the Board convened in the fall. The report of the state examiner was considered unfair by the local board of trustees, in view of the fact that a complete set of laboratory equipment had been ordered and was to be installed in the new building upon its completion that year. The high school remained from the list of accredited schools for a period of less than a year.

The new high school was opened in the fall of 1909 with an enrollment of 77 pupils. At that time, T. J. Troy was superintendent and acting high school principal.<sup>38</sup> Miss Easter, who came to teach in the high school that fall, was not elected principal until the fall of 1911.

The new school was located outside of the city limits, and was not made part of the city until September 22, 1911, at which time the board moved to petition the city council

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<sup>38</sup>. Minutes of April meeting, 1909.

to have the site made a part of the city.<sup>39</sup> In 1914 an addition was built to the high school to house the grammar grades pupils. At the present time, this portion of the building is being used by the Northern Montana College.

The Northern Branch of the Greater University of Montana was started in Havre during the summer of 1927 with the establishment of a normal training course. Having no other available buildings the board of education was asked by the chamber of commerce to grant the use of the left wing of the building for the College. The grammar grades were then partly housed in what used to be the old gymnasium and partly in the basement of the Presbyterian Church. Because of the lack of funds for the erection of buildings of its own and because of the increase in enrollment, the college was obliged to continue the use of this section of the building.

During the time when there was no Presbyterian Church, services were held in the high school and this interchange of the buildings for church and school purposes was not a new policy. During the early years, the school buildings were used by various churches and fraternal organizations as a meeting place. At one time the school district received a monthly rent of \$20 and \$15 respectively from the K. of P. and A. O. U. W. lodges.

In June of 1915, the board of trustees voted to deed all high-school property to the county for the sum of one dollar,

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<sup>39</sup>. Minutes of September meeting, 1911.

for the purpose of creating a county high school. The first vote taken on the matter passed by the total of 21 to 0. But another election was held that year, and the measure lost-- so the deed was returned to the district.<sup>40</sup>

Tuition was charged for the first time in 1913, which was set at a sum equal to the cost of education. The same year the board of trustees stopped buying school supplies, heretofore furnished free to high-school students. On December 15, 1917, at 4:30 A. M. a fire broke out in the high school, causing loss and damage amounting to over \$30,000. The building, however, was insured for the amount of \$31,500. Most of the school records were burned at that time.<sup>41</sup>

In order to accommodate the high school, the Presbyterian Church basement was completed by the board at a cost of \$1000. The new high school building was erected in 1918 at a cost of \$50,054. The sum of \$14,160 was spent for plumbing fixtures and their installation. Manual training was dropped from the curriculum, and military training substituted during this year.

#### Extra-Curricular Activities

Music was one of the first "frills" added to the Havre schools. In 1903 an organ was bought for the schools for the sum of \$40. A drawing and music course was added to the curriculum in the fall of 1912, and a Miss Vera MacKenzie

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40. Minutes August Meeting, 1915.

41. Ibid. - December 15, 1917.

was hired as the first teacher for these courses at a salary of \$90 per month. In the fall of 1918 O. P. Thayer was engaged to teach instrumental music in the schools, and was allotted a sum of \$350 for instruments. In the fall of 1923, Miss Marguerite Hood, former state supervisor of music, was employed as a teacher in Havre. In the spring of 1923, members of Havre High School attended a Music Festival at Big Timber. Another addition to the curriculum was that of a Smith-Hughes course in agriculture in 1922. The first full-time Smith-Hughes instructor was a Mr. Robert Kilbourne, who was employed at a salary of \$2000. He was followed by a Mr. Mountjoy. During the depression this branch of work was discontinued, and has not been reinstalled up to the present time. This same year the Havre<sup>high</sup> school became a member of the Northwest Association and the North Central Association of accredited schools.

The first health problem presented itself to the schools in the form of smallpox. The schools were closed on April 27, 1908, due to the epidemic and to the illness of Superintendent Troy.<sup>42</sup> The teachers were dismissed on May 12 until the end of the term. However, the high school and the seventh-and eighth-grade classes were conducted by Mr. Troy with the aid of two teachers, allowing the members of these classes to finish their work. Before school was opened on May 21, all pupils had to be vaccinated. In March of 1912 the east-side

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42. Minutes April 27, Meeting, 1908.

schools were closed for a period of one week on account of the prevalence of measles. The schools were closed on account of influenza from October 9, 1918, until November 25. The first school nurse was Mrs. Robert Lucke, who was employed on December 15, 1918, at a salary of \$150. In the fall of 1936, Miss Alma Jakoubek was employed as a full-time nurse, in order to facilitate the health and physical education program in the Havre schools. Havre is one of the few schools in the state to have a public-health nurse.

The physical education program was added to the curriculum at the request of a committee representing the Women's Club, who met with the board in April of 1918 and asked that this department be added.<sup>43</sup> A full-time health and physical education program was added in the fall of 1936. The Havre schools are among the first in the state to have such a program whereby each pupil in the grades and high school is examined by the nurse and doctor, and are then given a thorough course in health as well as in physical education. Miss Laune Martin is the girls' physical education instructor, and Roy Wood is the instructor for the boys.

The old conception of physical education was to buy a basketball or baseball and let the boys play. Usually the man or woman in charge had little interest in, or knowledge about, this all-important part of a child's development.

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Minutes April Meeting, 1918. #3.

The girls were the first to have a basketball team, as mentioned before.

One of the many duties of the superintendent in these formative years was to act as the boys' and girls' athletic coach. The first mention of a boys' basketball team was made when Superintendent Troy accompanied a team to Bezean to the state tournament in 1912.<sup>44</sup> Any school that could afford to could send a team to the tournament. Havre's first team made the trip at a total cost of \$68 to the school. The following year Superintendent Abbott accompanied the team to the state tournament. Mr. William A. Chittick, the present Superintendent of Schools at Belt, Montana, was the first coach. He was employed as a commercial teacher, and received a salary of \$100 a month for teaching and \$20 additional for coaching. William Chittick was coach from the years 1914 to 1922, and received a salary of \$1600 the last year for this dual position of coach and teacher.<sup>45</sup> Henry H. Hoffland was hired to assist W.A. Chittick in 1917. David C. Morris followed William Chittick, and was coach until 1926. In 1926 he gave Havre its first state championship football team.

Robert Adams coached the following year, and he resigned to take the position of assistant coach in the physical education department of the Montana State College. Hugh Cottam coached from 1927 to 1933, but resigned to become salesman

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44. Minutes March Meeting, 1912.

45. Ibid. - May Meeting, Book Two, 1921



for the Lowe and Campbell Sporting Goods Company in this district. He was followed by R. H. Wylie, who is present head coach.

The stability of Havre's schools, and of the community, is again shown by the fact that during a 23-year period only five men have held the position of athletic coach. The athletic program, both intramural and interscholastic, of Havre ranks well with the best in the state, and does much towards providing clean and healthful recreation for the boys of the community. In 1927, a new gymnasium was built and, with the completion of its athletic field, Havre will rank among the best in the state in this department. For the past three years, Havre High School has been host to the teams of the state basketball tournament; and prior to that time, entertained the Class B schools for many years. This year Havre will be host to the sixteen-team A and B Class regional tournament.

#### High-School Principal

The size of the high school did not warrant the employment of a principal, and the superintendent usually assumed the duties of principal. Grace Easter was engaged for this position in 1911, after having taught English in the high school for two years.<sup>46</sup> Miss Easter held the position for a period of eleven years until 1922. She received a beginning salary of \$110 per month, and was raised to a salary of \$1600 for

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46. Minutes of the Meetings of the Board of Education, Havre School District No. 16, May, 1911.

the term the last few years in service. A chart, showing the names, dates and salary of the principals, is given below.

<u>Principal</u>	<u>Dates</u>	<u>Salaries</u>
Grace Easter	1911-1922	\$110-\$1800
Robert Julian	1922-1924	\$2000
E. T. Walker	1924	\$2700
W. J. Shirley	1925-1929	\$2400
L. F. Roubineck	Asst. 1930	\$1950
L. F. Roubineck	1931-1937	\$2000

Elizabeth Ireland was the first principal of the junior high school, also supervisor of normal training. Prior to her election to this position in 1917, she had been a teacher in a rural school near Havre, later teaching for a number of years in the city system. She held the position until she was elected County Superintendent of Schools in 1921. According to the minutes of the meeting of the board she received an efficiency rating higher than that of any other teacher in the system. In 1925 she was elected City Superintendent, and during her administration the high-school auditorium was built. In 1929 she was elected to the State Superintendency, which position she held until January, 1937.

Elizabeth Ireland was followed in 1921 by A. J. Raymond, who assumed the duties of junior-high principal and athletic director. He, however, did not coach the high-school athletic teams. Frank Kenny followed A. J. Raymond and was succeeded by Alfred Yager, who came to Havre in the fall of 1933 to take over the duties of principal in the new junior-high building.

### Board of Trustees

The success and progress of every school, like any other big business, is due to those loyal and unselfish men who compose the Board of Trustees, and whose duty it is to guide the destinies of a school's policy. Havre has been fortunate indeed to have had such able and willing men as members of its boards, who at all times gave freely of their time and knowledge in order that the youth of the community could receive the best in matters pertaining to their education.

When Havre School District No. 18 was created, it was a third-class district and its board was composed of three men. Those who served on this board until 1894 were George T. Sanderson, P. J. McIntyre, and Thad F. Raymond. In the spring of 1894, E. T. Broadwater, a very prominent business man of early Havre, was chosen to succeed P. J. McIntyre, and he was chosen as chairman of the board. By 1896 the district had grown enough to become a second-class district, and the board was increased to five. The members of this board were C. W. Ling, Chairman; H. O. Hearn, P. U. McIntyre, E. T. Broadwater, and George T. Sanderson.

Space does not permit naming all the members of the various boards who have served the district, but a brief list of some of the prominent ones who gave their services will be

given. Among these were James Auld, M. J. Healy, C. W. Conger, J. A. MacKenzie, R. A. Bentzin, W. B. Pyper, James Holland, Sr., L. K. Devlin, W. M. Smith, C. C. Bundage, S. K. Hudson, C. B. Wilson, and Dr. Charles Houtz.

Some notable achievements of the Board, besides their routine duties of hiring teachers, buying supplies and running the school in general were protesting to the State Textbook Commission the matter of yearly changing of texts, introduction of a salary schedule for teachers, reduction of bonded indebtedness, establishment of a merit system for hiring and raising salaries of teachers in 1908, teacher rating chart in 1918, and salary schedules in 1931.

The present members of the Board of Trustees consist of Chairman Elmer Hanson, Mrs. Jensine Hartland, L. G. Dunning, James Brendgard, and C. A. Lang.

The material used in chapters two and three of this thesis, dealing with the history of the elementary schools as well as that of the high school, is being used with the knowledge and consent of Mr. Shirley and will not be repeated in his part of the school survey. Mr Shirley will discuss the grammar grades as there is no junior high, merely a grouping of the sixth, seventh and eighth grades. The data on age-grade distribution of the elementary schools are being used in this thesis to aid in the prediction of future high school needs.

## CHAPTER III

SOCIAL AND ECONOMIC HISTORY OF HAVRE

Havre is the largest and most important city on the main line of the Great Northern in Montana. The credit for its location goes to "Jim Hill," when his engineers located an abundant supply of good water just a few feet below the surface, a short distance from the side track of the old St. Paul, Minneapolis and Manitoba Railroad. This siding was known as "Bull Hook Siding", but the officials desired a more appropriate name for their rail terminal. This jocular name came from an Indian translation of a legend about a large butte which is located just east of the present city. The Indian legend relates that a huge herd of buffalo were roaming over the uplands, and upon climbing this butte became tired. A large bull, who was leading the herd, lowered his head; and, with one great thrust of his horns, tore away a large portion from the top of the butte. This large depression allowed the herd to pass over without further exertion, and hence the name was given to this peculiar formation.

The present name of the city is said to have been suggested by two of the oldest settlers of this region, Simon Pepin and Gus DeCelles, who wanted it named after their city in France. The rail officials wanted to call the town Pepin after Simon Pepin, who donated the land for the Great Northern yards on

condition that they build their terminal here. He, being too modest, suggested the present name which was officially given to the new terminal site.

The terminal of the old St. Paul, Minneapolis, and Manitoba was located at Fort Assiniboine, about seven miles southwest of Havre. This Fort was built for the purpose of protecting the early settlers of this region from the Indians, especially the Crees, who were under the protection of the Canadian government. This tribe, having no reservation, was free to roam, and made frequent raiding trips into this territory, killing and driving off the ranchers' stock. Soldiers were kept at the Fort until after all the Indians were settled upon reservations, and soon after this the Fort was abandoned. The Fort added much to the social life of the community, and was also partly responsible for the bad name the city acquired through the conduct of the soldiers who were frequent visitors to its saloons and houses of vice. At one time a regiment of colored troops was quartered at the Fort. At the present time there are less than a dozen colored people making their homes here. A few years after the abandonment of the Fort, the local school board sent a petition to the state department, asking that a dry-land experimental station be established at the Fort. The request was granted, and today this station renders a much needed service to the farmers of northern Montana.

The coming of the railroad in September of 1887 was responsible for the settlement on the site of the present city. The first store was a tent affair owned by a James Sullivan, located on the ground now occupied by the Great Northern yards. In 1891, E. T. Broadwater and Simon Pepin bought the tent store from Sullivan and erected the first building of Havre, which was made of logs taken from the nearby Bear Paw Mountains. William Brown was the first citizen of Havre to build a log house, a large three-room structure.

Homesteaders came about 1900, and Havre grew by leaps and bounds. Havre soon became the headquarters and the business center of the region which included Hill, Liberty, and parts of Blaine, Choteau and Toole Counties. The division of Choteau County in 1912 gave Havre the county seat of Hill County, which was named after the founder of the Great Northern.

In 1890, with the beginning of the extension of the railroad to the Pacific Coast, the division point was moved to Havre, where extensive shops were built. Havre soon became the headquarters of the central district of the Great Northern, as well as for the Montana Division.

Havre was incorporated as a city in 1892, William Broadwater was its first mayor. It received a severe setback in 1903 from a very disastrous fire. This fire caused the city to be rebuilt upon a more substantial basis, and brick

buildings replaced the old shacks and log huts. The fire showed that there was a definite need for a more adequate water supply. Prior to this time water for the city was obtained from three artesian wells. The city was soon rebuilt with the aid of insurance money and private funds. Merchants were given extensive credit for new stock by eastern wholesale firms. So firm was their faith in the future of the community and its people that credit was freely given to all.

By 1900, the city had a population of over one thousand. Four years later, 2,500 inhabitants were located here. Over 500 railroad employees and their families made their home in Havre, with a monthly payroll of \$35,000. As shown by the census reports, Havre has grown steadily ever since. By 1910, Havre ranked twelfth among the cities of the state, with a population of 3,624. By 1920, it was eleventh, with 5,429; and in 1930 it was tenth, with 6,372. The present population is estimated at over 7,500.

Northern Montana, and especially Havre, owes its development to the faith and energy of James J. Hill, the founder and builder of the Great Northern. The railroad and the railroad people are still a very valuable part of the city.

In 1915, the discovery of natural gas in usable quantities was another boost for Havre, this being the second district in the state where a well was sunk. Today most of the homes and business establishments use natural gas for fuel.



Little farming was done, except that by a few "Nesters" in the Milk River Valley, prior to 1900. Between 1910 and 1920 the rural population was more than doubled. The farmers of this community are ambitious and thrifty. Many of the students of the Havre schools come from farm homes.

Havre was also the location of the earliest mining and exploration survey work in northern Montana. Within a mile of this city are located numerous coal mines, which are operated the entire year. Havre is located about thirty miles northwest of Chief Joseph's Battle Ground. This rugged region, known as the Bear Paw Mountains, is the source of much coal and timber. The mountains are located within the boundaries of the Rocky Boy reservation. This beautiful region is the home of the Boy Scout Camp maintained by the local Kiwanis Club. The state maintains a fishery substation on Beaver Creek in these mountains. This is also the location of one of Montana's C. C. C. Camps. Most of the trading of the Indians and of the C. C. C. Camp is done in the city of Havre. The fact that Havre has more homes owned by their occupants than any other city in northern Montana tends to show that the people of this community are not only prosperous, but are contented to make their home here. This attitude is very favorably reflected in the community's pride and interest in its schools.

## Recreational Facilities

Havre is known as the gateway city to the sport lovers of the north, as well as to the many Easterners brought out by the Great Northern each summer. The Theodore Roosevelt National Highway No. 2, an oil-surfaced road, passes through the city; and many tourists make this their headquarters en-route to Glacier Park. Havre has a modern, well-equipped tourist camp, as well as several up-to-date cabin camps.

Several beautiful parks add to the recreational enjoyment of the citizens of Havre. Penin park, which is located approximately in the center of the city, has an area of three acres. Kennedy Park is now under construction; and Beaver Creek Park, which is south of the city in the Bear Paw Mountains, contains 9,280 acres. The city of Havre owns a strip of land 12 miles long and a half-mile wide on either side of Beaver Creek; this was donated to the city by the federal government for park purposes.

The city owns and operates a 120,000 gallon swimming pool, adjoining which is a well-equipped municipal playground.

There are two modern, well-equipped hospitals in Havre, each capable of giving efficient care to about 3,000 patients annually, and each having a standard school for nurses. The Sacred Heart Hospital is located in the eastern part of the city, while the Kennedy Deaconess Hospital is situated in the western part.

The community is served by nine denominations and eleven churches. The Catholic, Methodist, Presbyterian, Episcopal, Baptist, Christian, A.M.E. Church, Lutheran and Salvation Army, each owning their own edifices. The combined church membership is over 5,000, which speaks well for the people of the community.

Havre is a strong fraternal city with the Masonic Temple, the Elks Temple, and the Odd Fellows Temple adding much to the beauty of the city's architectural features. Other lodges which play an important part in the fraternal life of the city are the Eagles Lodge, the Knights of Columbus, the Christopher Columbus Lodge, and the K. of P. Lodge.

The adult recreational life of the city centers largely in the American Legion, the Kiwanis Club, the Rotary Club, the Lions Club, The Women's Club, the Association of University Women, the P. E. O., and the Country Club which owns a \$10,000 club house and golf course three miles west of the city. The clubs organized for recreational purposes for the children are the Boy Scouts, of which there are three troupes, and a Girl Scout and Campfire Girl troop. Then there are the affiliated clubs; such as, the DeMolays, the Rainbow Girls, and the Catholic Youth Club.

During the summer season kittenball, baseball, and horse-shoe are enjoyed by the boys and the men on grounds owned by the city and maintained by the government and the American

Legion. The men of the community get recreation during the winter season by bowling, and by participation in a volley ball league and a basketball league. The city also maintains several skating rinks and a hockey rink during the winter months. These many recreational facilities have tended to keep juvenile delinquency in the community down to a very low point.

### Social-Economic Status

By means of a questionnaire to students, data were gathered concerning the social-economic status of the families represented in the Havre City Schools. A total of one thousand and ninety-four questionnaires were correctly filled out, and returned. The questionnaire asked for the following information: The occupation of the father and of the mother; if she were working outside of the home, whether or not the father and mother belonged to any fraternal organization; nationality of father and mother; number of years parents resided in Havre, education of parents; whether or not the parents owned their home. Only two questions concerned the children directly--whether or not they belonged to a church, and whether or not they belonged to any club or organization.

The data show that the parents of the Havre School children are a highly cosmopolitan group as to race and occupational pursuits. Ten hundred and fifty-one gave the nationality of their mothers, which was distributed among twenty nine different nationalities. As

will be noticed by consulting the chart, many pupils gave the nationality of their parents as American. There were also a number of mixed stocks with the greater number of parents having Scotch-Irish, English-Irish, German-English ancestors. The only races which showed no tendency to intermarry were the Japanese, Chinese, and Armenians. The greatest number of mixed marriages occurred between the Germans and Scandinavians.

Table I NATIONALITY OF CHILDREN'S PARENTS

Nationality	Father	Mother	Nationality	Father	Mother
Afghanistan	1	0	Indian	2	2
American	327	323	Irish	65	71
Armenian	2	2	Italian	24	21
Austrian	0	1	Japanese	22	22
Bohemian	8	8	Mixture	104	127
Canadian	1	7	Negro	3	1
Czechoslovakian	4	4	Norwegian	119	130
Chinese	2	2	Polish	10	10
Danish	15	11	Rumanian	1	1
Dutch	25	22	Scotch	30	23
English	62	72	Spanish	3	2
Finn	0	1	Swedish	35	22
French	27	34	Swiss	0	7
German	134	119	Syrian	3	3
Greek	3	2	Welsh	3	1
Hungarian	1	0	Total	1051	1036

The leading occupations of the fathers of the pupils enrolled in the Havre schools are railroading and farming. A total of 257 fathers are employed by the Great Northern Railroad Company, while 125 fathers are engaged in agriculture. The following chart shows the distribution of the occupations of the fathers of 1085 pupils who answered this question. Under miscellaneous trades were listed such occupations as

painters, carpenters, mechanics and other, where only one or so were employed at any given craft.

Table II OCCUPATIONS OF PUPILS' FATHERS

Railroad:	277	Farmers and Ranchers	125
Brakeman	26	Miscellaneous Trades	82
Conductor	17	National Government	30
Engineer	38	Office Workers	6
Fireman	15	Professional	49
Shop & Main.	181	Retires	1
		Separated, Dead,	
Business	150	Invalid	79
Clerks & Sales	55	State Employees	9
City Employees	15	W. P. A.	61
Common Labor	128	Total	1035
County Employees	18		

The fact that 504 children come from homes which are owned by their parents shows that the community is fairly stable in respect to mobility of population, and that these children come from homes which are fairly well established financially. Another fact tending to show that the families are in at least moderate financial circumstances is the number of children who come from homes where the parents belong to some fraternal organization. The fathers of 542 and the mothers of 424 pupils belong to some social or fraternal group.

The education of the parents of the Havre school children is shown in the following chart. As can be seen, the numbers of fathers and mothers having eighth grade and college educations are about the same, while a greater number of mothers have high-school educations.

Table III EDUCATION OF PARENTS

	Father	Mother
Below Eight Grade	24	19
Eighth Grade	475	398
High School	298	401
College	186	181
Total	983	999

The number of children coming from homes wherein the mother works outside of the home in either full-time or part-time work is comparatively low, as only 110 children reported their mothers working. This leaves a total of 986 children whose mothers are able to spend their entire time in care of their families and homes.

The following chart shows the distribution of the children's mothers, as to occupation. No attempt has been made to compile the amount of time spent in work outside the home. Nine children reported their mothers as dead, and in three cases the mother was the apparent sole support of the home.

Table IV OCCUPATION OF MOTHERS WORKING OUTSIDE OF HOME

Beauty Operator	5	Insurance	3
Butcher	1	Janitress	3
Cashier	2	Laundress	11
Chambermaid	2	Nurse	2
Clergy	2	Office Work	9
Clerk	3	Teacher	6
Cook	7	Theatre	2
Dishwasher	1	Waitress	11
Domestic Servant	20	W. P. A.	12
Dressmaker	4	Not stated	2
		Total	110

A very large number of the children receiving religious training; 895, or 81.81%, reported belonging to a church or

were, at least, attending services and Sunday School. 308 pupils, or 28.15%, reported membership in some club or social organization, outside of school; such as, Boy Scouts, Girl Scouts, C. Y. O., C. D. A., Junior A. O. U. W., DeMolay and Rainbow.

The material in this chapter was gathered jointly by Mr. Shirley and the author but will not be used by Mr. Shirley in his survey of the elementary schools. These data are being presented to indicate the background of the school children of this community, all of whom are present or potential high school pupils.



CHAPTER IV  
SENIOR HIGH SCHOOL CURRICULUM

The Program of Studies

Havre follows the prevailing practice of many communities of its size in offering a multiple curriculum program with constants and electives. Table No. V compares the number of units of work offered in Havre in each of the eleven major divisions of subject matter with the average number offered in seven other Montana communities of about equal size. A unit of work involves five recitations a week for an entire school year of 180 days. According to Table V, the range of work in the Havre High School is about the same as the average number offered in the high schools of the seven communities. The total units of work offered in Havre is  $53 \frac{1}{2}$ , the average in the seven communities is  $53 \frac{2}{3}$  units.

Table No. V Number of Units of Work offered in High Schools of Seven Representative Communities and Havre, in each of the Eleven Great Divisions of Subject Matter.\*

	Havre	Seven Communities (Average)
Art	2	3
Commercial Subjects	11	8 $\frac{1}{2}$
English	6	6 $\frac{2}{3}$
Foreign Languages	7	7
Home Economics	2	3
Industrial Arts	4	4
Mathematics	4 $\frac{1}{2}$	3 $\frac{1}{3}$
Music	3	3 $\frac{2}{3}$
Natural Sciences	4	4
Physical Education and Health	4	5/6
Social Sciences	4	4 $\frac{2}{3}$
Vocational	2	5 $\frac{1}{3}$
TOTAL	53 $\frac{1}{2}$	53 $\frac{2}{3}$

The total number of units offered in Havre High School is 53 $\frac{1}{2}$  as compared to the average of the seven schools, which is 53  $\frac{2}{3}$ . In most of the subject fields, the number of units offered is about the same in Havre as in those schools used for making the comparisons. Havre exceeds the average in the seven high schools in commercial work with 11 units offered to the average of eight for the other school. In physical education and health Havre exceeds the average for the seven schools, offering two units to 5/6 of a unit for the other schools. The average of the other schools is greater in art, home economics, industrial arts, and vocational work. Many schools offer a complete course in industrial work and also

\*Schools used in comparisons--Dawson County, Custer County, Great Falls, Glasgow, Whitefish, Gallatin andergus Counties.

have a Smith-Hughes course in agriculture.

When considered on a general average, the Havre High School is offering a curriculum to its boys and girls which seems to be typical of the average Montana high school.

#### The Extra-Curricular Activities

Havre is very fortunate in having a representative group of extra-curricular and semi-curricular activities in the Junior and Senior High Schools. It is now accepted as one of the functions of the modern high school to provide valuable experiences for the boy and girl through participation in the various literary, dramatic, musical, athletic, social, hobby, and self-governing organization.

#### Standards for Extra-Curricular Activities

In evaluating the work of such organization in Havre, the following standards, used in many previous high school surveys were followed.<sup>47</sup>

1. Are the extra-curricular activities of such a number and variety that every student desired to participate, and does participate, in at least one activity?
2. Are these activities well supervised by competent supervisors?
3. Do the school administrative authorities encourage extra-curricular activities?
4. Does each extra-curricular activity contribute to at least one of the following: Health, ethical character, good use of leisure time, good citizenship, good social leadership?

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47. Strayer, G. D. Director Survey of the Schools of Maple Heights, Ohio. Bureau of Publication, Teachers College, Columbia University, 1929. p. 223.

5. Do all teachers participate in these activities; or do a few participate in many, and some in none at all?
6. Are these activities functioning efficiently, or do they exist in name only?
7. Do as many pupils as possible have an opportunity to enjoy the exercise of initiative, and the advantages of administrative service?

When standard No. 1 is applied to the Havre High School, the need for more activity is at once apparent. Only 298 of approximately 600 students belong to one of these extra-curricular organizations.

Table No. 6 shows the type of activity and the number of members that were engaged in extra-curricular work at the beginning of the second semester of 1937.

The total membership of these activities is 433 students, 101 took part in two activities; 17 in three activities, 16 in 4 activities; and 1 in 5 activities. A total of 298 different students take part in the extra-curricular activities of the Havre High School.

The number of activities show that there is about one activity for each full time teacher and assignments should be so made that the burden of sponsorship does not fall upon only a few. A requirement to have every pupil participate in at least one activity would doubtless be an improvement.

Table No. 6 Extra-Curricular Organizations  
And Their Membership

Club or Activity	Membership	Officers
Annual	21	4
Amateur Club	31	0
Basketball Intramural	102	8
Basketball Interscholastic	13	3
Biology Club	14	3
Characterization Club	11	0
Chemistry Club	47	3
Dramatics Club	40	2
Football Intramural	60	4
Football Interscholastic	65	3
History Club (Current)	5	3
Student Council	8	3
Home Economics	10	2
Musicians' Club	16	3
Make-Up Club	20	3
Girls' Ath. Association	125	3
Poetry	5	3
Lettermen's Club	22	3
Press Club	23	4
Shop Club	18	3
Spanish Club	73	3
Spur Club	32	6
Stampede	42	4
<b>TOTAL</b>	<b>898</b>	<b>76</b>

Each activity listed in Table 6 is supervised by one or more adults who is qualified to direct the activity. These supervisors and sponsors are usually faculty members. Standard 2,3, 4 are all well met by the clubs in Havre High School. Standard 5 also, partially, for most of the teachers have had a part in one or more of these activities as sponsors and supervisors. However, some teachers have an over-load of activities, while others have a very light load.

High schools of today should engage an extra-curricular supervisor to coordinate the work of each club or activity, and to help in the distribution of the sponsorship among the

faculty members. The person responsible for the extra-curricular program would be of necessity released from a full-time teaching load. Some of the activities, when standard 6 is applied, need to undergo reorganization and a general "pepping up" process. The vital point in any organization is interest to the members. A lack of interest, in some of the activities, shows a need for change in the organization. When standard 7 is used, it brings out the fact that a very small number of students hold a majority of the offices, many holding three or four offices, while a great many members never receive an office. This, no doubt, is because of the general ability, popularity, and interest on the part of certain students. This fact shows the need for some form of point system to provide a better distribution of these benefits, and to protect a few of the active students from overwork which may lead to a neglect of class work and a possible detriment to their general mental and physical health.

Officers of the extra-curricular activities in the Havre, schools are elected for a nine-month period; and it can be seen, by referring to Table 8, that there are a total of 76 possible administrative officers. To this number can be added the 12 offices of the four classes to make a total of 88. This means that only one of every 10 members hold an office during the school year, when club membership alone is considered. Upon the basis of total school population, only

1 in every 7 students will hold an administrative office.

A check on the individuals holding office shows that the total of 88 offices were held by 67 different people. This means that during a school year only 1 out of every 9 high-school students receives the benefits that come from holding an office in a class or activity. While this is a fairly good distribution, on a basis of percentage, only about 11 per cent of the students ever receive any administrative experience. This condition could be remedied by electing officers every semester, rather than only once during the school year.

#### Some Extra-Curricular Problems

During the school year of 1936-37, a definite period was set aside during regular school hours for the development and supervision of school clubs. This period set aside for this work was the last period on Friday of each week. This plan, after a short trial, was abandoned due to the conflicts caused by students who desired to belong to more than one club. Then, too, there was the problem of handling those not wishing to belong to a club. About half of the six hundred students enrolled did not belong to any club. To solve the situation the period was set for 3:30 P. M. on any day of the week suitable to the members and the faculty sponsor. As a result of this change of time, the attendance at club meetings has fallen off rapidly; and, if continued at the present rate, the clubs will soon die out.

There is a tendency to incorporate into the regular curriculum activities once entirely outside of the curriculum. For example, the school newspaper or annual is often closely associated with the regular English or journalism work; science clubs carry on their projects through laboratory experimentation; choruses and orchestras are frequently accredited classes in music; dancing and swimming classes receive credit in physical education. By means of student activities, the school has an opportunity to guide youthful energy into the proper and desirable social channels. It seems that anything worth sponsoring by the schools should be considered part of the work of the school, and that faculty and school time should be used for such activities. The school must supplement the home and church in matters of social guidance and social adjustments if we are to prepare worthy citizens of our respective communities.

#### Senior High School Course of Study

Havre's present Senior High School course of study follows those recommended by the State Department and supplemented by the departments representing the various subject divisions. Without a clear working philosophy and careful determination of aims, content, desired outcomes, and a means of appraisal, a rather chaotic condition is likely to be the result. Havre has realized this and has instituted a testing program, a radiovisual program, and a health program. However, there



is a definite need for a director of the audio-visual program of education, to correlate the work of the classes within a department as well as the departments themselves. There is also a need of cooperative development of the courses of study for the Junior and Senior High Schools by committees of the teachers in their respective subject fields. An educational guidance program would also add much to the enrichment of the curriculum. For the most part, the Senior High School teachers are responsible for their own objectives to be reached in their classes; such as, aims, material to be covered, and textbooks to be used. Little attention apparently is given to criteria for the selection of aims and content or to the relative values of these aims and content. Outcomes and measures for evaluation are omitted in most courses.

#### Courses Offered by Havre High School

The only requirement of the Montana State Department of Education for high-school graduation is that each pupil must have a total of sixteen units, three of which must be in English and one in American History. The other twelve may be selected from a group of constants and electives offered by the individual schools.

A pupil entering Havre High School may elect to be graduated from a general or from a college preparatory course. Each course has a rather flexible rule as to selection of subjects. If a pupil plans to enter a college he must plan, with

the aid of the principal, his program for the desired course. In this respect, there is a weakness in the system, as there is no definite program for educational guidance. Such planning as there is consists of assigning a pupil to certain required courses which, when completed, will admit him to college.

A pupil desiring to be graduated from Havre High School must have a credit in physical education and health, in addition to those subjects mentioned before as required by the state. He may select the balance of his eleven units from a total of fifty electives offered. The Havre schools have departed from the traditional algebra and foreign language requirements. A course in general mathematics is offered to those who do not wish to study algebra and geometry.

A pupil wishing to prepare himself for college entrance must have four years of English, although he may substitute public speaking or journalism for English IV. In addition, every student must have one unit of physical education and one unit of American history. After meeting the above requirements, he must choose three out of each of the four of the following groups, from which he may select the ten additional units required. The subject groups and number of units in each group required for college entrance are: mathematics, two units; physical science, two units; social science, two units; and language, two units.

Table 7 CURRICULUM OF HAVRE HIGH SCHOOL

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 3	English 4
Spanish 9	Spanish 10	Latin 3	Journalism
Latin 9	Latin 10	Chemistry	Public Sp.
German 9	German 10	Physics	Soc. Sci. 4
Gen. Sci.	Biology	Biology	Physics
Algebra	Woodwork	Typing	Chemistry
Gen. Math.	World History	Personal Typ.	Biology
Home Ec. 9	Home Ec. 10	Shorthand	Mech. Dr.
Woodwork 9	Geometry	Bookkeeping	Econ.
Tr. Bus. Tr.	Jr. Bus. Tr.	Office Tr.	Shorthand
Soc. Sci.	Band	Mech. Draw.	Typing
Band	Orchestra	Voc. Work	Pers. Typ.
Glee Club	Glee Club	Adv. Alg.	Salesmanship
Orchestra	Phys. Ed.	Solid Geometry	Comm. Law
Phys. Ed.		Trig.	Bookkeeping
		Soc. Sci. 2	Office Tr.
		Am. Hist.	Voc. Work
		Band	Adv. Alg.
		Orchestra	Trig.
		Glee Club	Solid Geom.
		Phys. Ed.	Band
			Orch.
			Glee Club.
			Phys. Ed.

### Music Education in the High School

The introduction of music into the high school curriculum came in 1912 when a drawing and music course was added and a special teacher was engaged to teach these subjects both in the grades and in the high school. In the fall of 1918 instruction was started in instrumental music and a sum of \$350 was allotted for the purchase of instruments.<sup>48</sup> Then in the spring of 1923 Havre High School was represented, for the first time, in a music festival held at Big Timber.

This humble beginning in music education has been favored and encouraged by the board of education, the superintendent

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48. Minutes of September 13, 1918, Meeting.

of schools and the principal of the high school until a full time department was created in the fall of 1936. The number of students participating in the various instrumental groups has increased from 80 in 1930, to 170 in 1936-37. Each year music supplies and a number of instruments have been purchased. The purchase of uniforms for the band was aided by the Band Parents' Club.

### The Musical Organizations At Work

Instrumental and vocal music from the music department is used throughout the entire school year to aid in the putting on of programs of all other departments in the school. Music is furnished at all athletic contests and gymnasium exhibitions, for all class and club plays, operettas, assembly programs, pep rallies, and parades. Solos, duets and entire ensembles are called for to furnish color and entertainment for the school and the community. In addition to the above mentioned functions, the music department also furnished a dance orchestra which is available for all school parties.

### High School Credits in Music

The urge to study music has been the greatest factor in building up the music program in the Havre High School. Since the work is of a voluntary nature, such a program must be of the type to attract and hold its members on its merits alone over a long period of years. The physiological basis for the

**Table 8 The Number and Variety of Groups in the Junior and Senior High Band and Orchestra.**

<b>Varieties</b>	<b>S.H.B.</b>	<b>Jr.B.</b>	<b>Orch.</b>	<b>H.S.B.</b>	<b>I.I.</b>	<b>L.Jr.B.</b>	<b>Total</b>
7th Graders	0	12	6	0	0	6	24
8th Graders	4	10	6	0	0	2	22
9th Graders	15	3	5	3	5	4	33
10th Graders	12	1	8	4	5	5	35
11th Graders	13	0	7	0	6	0	26
12th Graders	15	0	3	0	5	0	13
Girls	18	19	12	5	8	13*	65
Boys	29	17	23	2	13	21*	105

**S.H.B. Senior High School Band**

**II. Individual Instruction**

**JR. B. Junior Band**

**H.S.B. High School Beginners**

**L.J.B. Little Junior Band**

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**\*Balance of membership from 4th, 5th and 6th grades.**

**Table 9 Members in Each Group and Instruments Played**

<b>Instruments</b>	<b>S.H.B.</b>	<b>Jr.B.</b>	<b>Orch.</b>	<b>H.S.B.</b>	<b>I.I.</b>	<b>L.Jr.B.</b>	<b>Total</b>
<b>Cornets</b>	13	6	4	0	6	11	40
<b>Trombones</b>	4	1	0	0	2	3	10
<b>Drums</b>	4	2#	2	0	0	4	12
<b>Tubas</b>	1	1	1	1	3	1	8
<b>Baritones</b>	5	0	0	0	2	0	7
<b>Mellophones</b>	3	3	0	3	3	5	17
<b>Clarinets</b>	8	9	2	3	2	4	28
<b>Saxophones</b>	8	4	0	0	1	5	18
<b>Bells</b>	1	0	1#	0	0	1	2#
<b>Violins</b>	0	0	19	0	1	0	20
<b>Piano</b>	0	0	1	0	0	0	1
<b>Contra Base</b>	0	0	1	0	0	0	1
<b>Guitars</b>	0	0	6	0	1	0	6
<b>Totals:</b>	<b>47</b>	<b>26</b>	<b>36</b>	<b>7</b>	<b>21</b>	<b>34</b>	<b>118</b>

**Orch.** Junior and Senior Orchestra

**S.H.B.** Senior High School Band

**I.I.** Individual Instruction

**Jr.B.** Junior Band

**H.S.B.** High School Beginners

**L.J.B.** Little Junior Band

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#Plays both in orchestra

expression of rhythm and melody is strong enough that 170 students have selected music as part of their high school work. Realizing the contribution that music makes towards the general cultural education of each boy and girl, the administration has tried to stimulate participation by offering credit for band, glee club and orchestra as well as for private instruction under a competent instructor. A student may count one credit earned in the music department towards graduation. The issuance of letters, pins, and rings helps in the retention of players over a long period of time as evidenced in the data given in table 8. Good equipment, uniforms, and encouragement--by having something continually to play for--are vital to the success of such a program. Out of town trips build up enthusiasm and more interest in future participation. The annual band festival held at Havre and sponsored by the Chamber of Commerce, provides the group with an incentive to do their best, and serves as a means of creating community spirit and good will. The spring band festival was started by director Clifford Knapp in 1930 and has grown to such an extent that 32 bands from the northern part of the state, with over 900 musicians were in attendance for the 1937 festival.

#### Benefits of the Music Program

Good musical organization are a fine median for advertising the school and the community. The citizens are proud of their part in supporting the school system which sponsors

such worthwhile activities and in this manner there is a healthful morale built up in the community centered around the school. The individual profits most from his participation in that it furnishes him a means of self-expression and much enjoyment. The study of music helps to give the student a more cultural balance and poise, and enables him to spend his leisure time in an enjoyable and a beneficial manner.

#### Improvements Needed in the Music Department

The membership could and should be increased by the addition of more school instruments. A budget should be made for the band with the purpose of building up this organization. Additional instruments are needed in order to give the band proper balance.

The Grammar School should have its own orchestra as it would fill a very important need for this school.

The beginners should be taught in their own school rather than being required to report to the high school for individual and group instruction. A regular school period should be devoted to this work and so avoid the many present conflicts.

The equipment of the music room needs to be added to in order to facilitate the instruction of the individuals and groups. Shades are needed for the windows, some instruments need repairing, and permanent heavy music racks are needed. One very urgent need is the sound proofing of the music room which would be mutually beneficial to the music and to the



physical education departments because the noise made by each group prevents the giving of oral instructions.

The present musical organization is growing and it is urged that the board continue to add to the department so that it may fill to the utmost its place in the modern high school curriculum. There is a growing need for the addition of more courses in this department. One which should be added, and could be added with very little expense, is a course in music appreciation. With the present radio facilities much worthwhile material could be obtained for such a course by merely pressing a button and turning the dial.

The administration does not provide sufficient funds and there are no provisions in the budget for the music department except for that of the salaries of the instructors. The present voice instructor spends five-sixths of her time with the Junior High School groups, and in this respect the high school music department is being neglected.

#### Textbooks and Instructional Supplies

The selection and provision of textbooks plays a most important part in the development of the curriculum. They are the indispensable tools in the achievements outcomes as outlined in the course of study. The books and materials for instruction are selected jointly by the superintendent and teacher. The Havre High School is indeed fortunate in having a superintendent and staff who have kept abreast with modern

trends in education by continuing their education at summer schools in various parts of the country. Each department has at least one member of its staff who holds a Master's Degree in Education, with work bearing on his particular subjects. One of the best criteria for the selection of any text is to choose one which will aid in carrying out the philosophy of the school and of the teacher using it. Those who are experts in their respective fields and who have taught from a number of books are best qualified to say what constitutes a good text for their particular class in any community. In this respect the selection of texts for the Havre High Schools is carried out in an efficient and economical manner. New books are selected jointly by the teachers and superintendent, with the understanding that they are to be supplemented by current available audio-visual aids in the form of slides, films, and radio broadcasts.

#### Suggested Program for Curriculum Revision in Havre

Any organization for curriculum development should involve the combined efforts of the entire staff, each contributing his or her ideas. A course of study can function only to the extent of the abilities of the individual members of a staff using it. The major parts of a curriculum revision program are: first, the planning and initiating of the program; second, the construction of a course of study suitable to the needs of the community; and third, the installation and the teaching of the necessary courses. Expert advice and help

should be secured whenever possible in any curriculum revision undertaking. The construction of adequate curriculum is by no means an easy task, yet it must be achieved if the community is to receive the proper returns for its investment in the school plant.

According to Norton and Norton the following recommendations are made for curriculum revision.<sup>51</sup>

1. The selection of a representative committee of teachers to work with the principal and superintendent, who will cooperatively develop a coordinated statement of the general aims of education, and the aims of the various subject fields.
2. The organization of a committee for the creation of a course of study from the teachers best adapted to, and qualified for, the work.
3. Securing and consulting all available research materials dealing with curriculum construction and revision.

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<sup>51</sup>. Norton, John K. and Margaret A. Foundations of Curriculum Building, Ginn & Co., Chapter VIII, 1936

## CHAPTER V

THE ACHIEVEMENT AND EXPECTATIONS OF THE HAVRE HIGH SCHOOL STUDENTS

This chapter deals with the adequacy of educational opportunities in the Havre High School and their administration to best meet the individual needs of the boys and girls. As a basis for this phase of the Survey, the results of the Henmon-Nelson intelligence texts and the Bones-Harry achievement test, Form A, for secondary schools, were used.

Age-Grade Status

In this study of the age-grade relationship for the Havre High School, the plan employed was to count all pupils as of normal age who range from three months under fourteen for the 9th grade to 3 months over the traditional age limit for the grade involved. This arrangement allows for a range of three months in either direction for any given grade; or, studied from another point of view, it allows a range of eighteen months for each grade.

This study shows the number of pupils in each age group for each grade in the high school. It also shows whether or not the Havre schools are successful in getting pupils into school at the proper age, as well as the number of pupils who are over-age, normal age, and under-age. The percentage for over-age, normal age, and under age pupils in each grade from the 9th through the 12th, and for the school as a whole, are to be found in table 11.

Table 11 Percentage of Pupils in Each Grade Over-age normal-age, and under-age for a given grade.  
Havre High School, September, 1926.

Grade	9th	10th	-11th	12th	Av. % for 4 classes
Over-age	34.35	22.85	22.83	28.19	27.06
Normal-Age	55.83	46.86	47.24	45.25	48.80
Under-Age	9.81	30.28	29.92	25.55	23.89

By consulting Table 11, it is apparent that about half of the pupils in the high school were in their proper grade according to their age at the beginning of the school term. Approximately one-fourth of the students are over-age, and slightly less than one-fourth are under their age-grade level. It can be seen that a larger percentage of freshmen, or grade nine, are over-age than for any other grade. While there is no definite evidence as to the cause, no doubt there are a large number who remain out of school a year before starting high school. Most of the over-age freshmen come from country schools, or are children who transfer to Havre upon graduation from the eighth grade. About 21 per cent of those in the ninth grade who are listed over-age are only one year behind the normal age for their grade. The percentage of pupils one year over-age decreases for the tenth and eleventh grades to about 17 and 21 per cent respectively. It is significant that slightly over 28 per cent of the seniors are above their age level. This-perhaps is because of two reasons: the one,

that there is very little chance to get employment after graduation; and the other, that the school offers an attractive curriculum which encourages them to continue their education. There were only five post graduates enrolled at the beginning of the term. This, no doubt, is because of the fact that Northern Montana Normal, a division of the Greater University of Montana, is located in Havre.

Tables 12 and 13 show the age-grade distribution for the entire enrollment of the Havre city schools. The ages were taken on September first, and are all figured to the nearest year.

The inclusion of the age-grade distribution tables of the elementary school in this survey is done for the purpose of showing why the pupils are placed as they are upon entering the high school and also for the purpose of helping to predict the rate of growth and future needs of the high school, based upon the expected annual increase from the eighth grade.

Table 12 Distribution of Enrollment of Elementary Grades by Age

Grades	First		Second		Third		Fourth		Fifth		Sixth		Seventh		Eighth		Total byage in all grades	
Ages	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Under 6	2	4	6															6
6 years	53	36	89	8	14	22	1											112
7 years	15	10	25	38	40	78	9											117
8 years	1	2	3	8	8	16	7	9	16									112
9 years				1	3	4	19	47	72	6	5	11						115
10 years					1	1	3	17	24	39	3	6	1	1	2			117
11 years		1	1				1	3	4	17	12	29	8	10	18	1	1	120
12 years							1	5	5	17	12	29	27	34	61	8	17	114
13 years								1	1	4	2	6	21	27	48	34	27	107
14 years									1	5	5	6	9	10	19	10	10	40
15 years									1	1	2	2	2	3	5	7	4	15
16 years													2	1	3	1	1	4
17 years													2	1	3	1	1	1
Grade Totals			124			121			125			127			133			980
Underage			6			122			16			11			20			18
Overage			29			21			37			41			52			38

Table 13 Age-Grade Distribution of High School Enrollment

Grade	Nine			Ten			Eleven			Twelve			Post Grad.			Total by ages
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	
Ages																
12 years	1	1	2	18	22	40	13	16	29	0	4	4				2
13 years	6	8	14	31	51	82	26	34	60	10	21	31				14
14 years	45	46	91	17	12	29	13	14	27	23	39	62				131
15 years	19	16	35	12	4	16	13	13	26	20	13	33				150
16 years	9	1	10	12	1	13	7	3	10	3	2	5				130
17 years	6	2	8	4	1	5	0	1	1	1	2	3	1	1	2	113
18 years	3		3	2	1	3							1	1	2	52
19 years				0	1	1				1	2	3				9
20 years																6
Grade Totals			163			175			127			137			5	607
Underage			16			40			29			35				
Overage			56			53			38			42				



This study shows the number of pupils in each age group for each grade, and whether or not the school has been successful in getting the pupils in school at the proper age, as well as the number of pupils who are average, normal, and under-age in each grade. The percentages for over-age, normal and under-age pupils in the high school can be found in Table 13. A study of the age distribution of the pupils in the seventh grade shows that the ages vary from ten to sixteen years. Likewise, the age range for the eighth grade is also over a period of six years--from eleven to seventeen. The greatest age range for high school occurs in the tenth grade, where the ages are from fourteen to twenty years; yet the percentage of under-age and over-age pupils is only 22.85 and 50.28, respectively, of the grand total.

The 27.06 per cent of those over-age represents a total of 187 pupils in high school who are retarded from one to five years. By far the largest number, 123, are retarded one years. This number represents 24% of the entire high-school enrollment. Forty-one students, or 6.81%, are retarded two years; while 2.82%, or only 17 students, are retarded three years. There are only five students who are retarded four years, and only one who is retarded five years. The pupil who is retarded five years is in the tenth grade and still in school, while two of the five pupils who are retarded four years have dropped from school to enroll in the C.C.C.

The percentage of students in the high school who are accelerated is slightly less than twenty. Of those accelerated, only four are two years ahead of their grade; and 116, or 19.26%, are one year ahead, according to their age.

The factor of accumulating retardation is shown in another way by Table 14. This table is based upon the number of pupils in each age group.

Table 13 shows the amount and distribution of over-ageness and under-ageness for the high school as a whole. The amount of over-ageness is slightly more than the normal age, and shows a tendency of the school to retard the dull pupils and to advance the bright pupils. Table 11 shows that throughout the high-school age groups the retardation and acceleration are about equal. The amount of acceleration is very low for the ninth grade, due, no doubt, to the reasons heretofore mentioned; and from the tenth grade on, there is a slight decrease in acceleration.

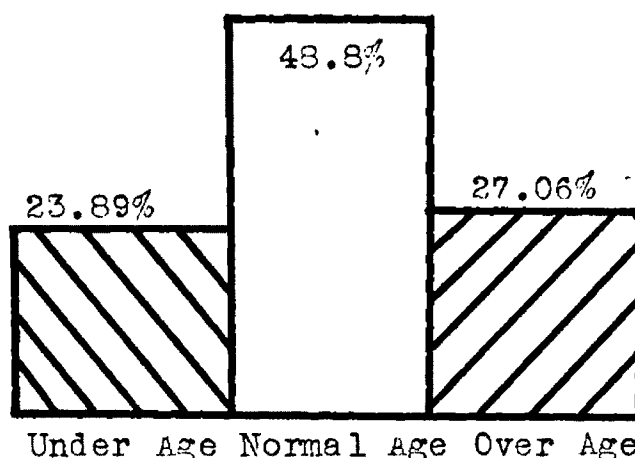
By consulting Table 12, one can readily see that the retardation is greatest in the grades and junior high school. About twenty-nine per cent of the incoming tenth graders in 1937 will be over age, while only sixteen per cent will be under age.

Table 14 Percentage of Pupils of Each Age Who Are Retarded Normal, and Accelerated. Based on Total Number in The Group.

Havre, Montana - September 1936

Ages	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Retarded	0%	0%	21%	19%	28%	25%	28%	31%	39%	23%	30%	32%	36%	35%	100%	100%
Normal	0	79	67	67	62	66	56	53	49	54	50	45	54	65	0	0
Accelerated	100	21	12	14	10	9	16	16	12	23	20	23	0	0	0	0

Graph I  
Percentage of Pupils Over-Age, Normal,  
or Under-Age For The High School



In the group involving the fourteen-year olds, who are normally tenth graders, the percentages of retardation and acceleration are equal. In all other cases, there is a higher percentage of retardation. The percentage of pupils who are in their normal age-group shows a slight decrease which corresponds to the increase in retardation. Since there is no mid-year promotion from the eighth grade into the senior high, many of the pupils in the eighth grade are likely to be slightly above their age-grade level. This tendency, no doubt, starts when a child who is not yet six years of age is not allowed to enter school, and so the age level rises. A mid-year graduation for both grammar school and senior high school would do much to reduce the percentage of retardation.

### Ability to Hold Pupils in School

A fairly accurate measure of the ability of a school to serve the boys and girls of a community is the length of time it is able to hold them in school. This is especially important during times of economic stress and times when opportunities for employment are few. The number of pupils for each of the first eight grades is fairly constant, as can be seen by consulting Table 15. There is a slight increase in the seventh-grade enrollment over that of the sixth, and there is also an equal decrease in the eighth grade.

Table 15 Enrollment by Grades in Havre Schools

September, 1936

GRADE	1	2	3	4	5	6	7	8	9	10	11	12	Total
PUPILS	124	121	126	125	127	112	133	112	163	175	127	137	1582

### Withdrawals from School

A total of 61 boys and girls out of the initial enrollment of 607 have withdrawn from school by May 1, 1937. Thirty-three girls and twenty-eight boys have withdrawn for various reasons which are listed in Table 16. The number of girls withdrawn by classes were: Seniors, 10; Juniors, 9; Sophomores, 5; Freshmen, 7; and Post Graduates, 2. The distribution of the boys withdrawn among the classes were Seniors, 4; Juniors, 6; Sophomores, 7; Freshmen, 10; and Post Graduates, 1.

Table 16. Showing Number of Boys and Girls Withdrawn and the Reasons for Withdrawing.

Class	No.	Reasons for Withdrawal from School
Fr. Boys	10	5 transferred, 5 work
Fr. Girls	7	2 transferred, 1 deceased, 4 no reason given
Soph. Boys	7	1 sickness, 2 work, 1 trans., 3 no reason
Soph. Girls	5	2 sickness, 3 no reason given
Jr. Boys	6	2 not interested, 2 work, 2 no reason given
Jr. Girls	9	4 trans., 1 ill, 1 not interested. 1 no place to room, 2 no reason
Sr. Boys	4	2 no reason given, 2 expelled
Sr. Girls	10	3 transferred, 1 married, 3 illness
P.G. Boys	1	1 no reason given
P.G. Girls	2	1 transferred, 1 no reason given

Sixteen boys and girls have withdrawn due to the changing of residence of their parents, and have enrolled in the schools where they are now making their homes. Seven have withdrawn because of sickness, and no doubt will resume their education upon the recovery of their health. Eight boys have withdrawn in order that they may work, two of these enlisting in the CCC. The largest number, a total of twenty-one, have withdrawn with apparently no definite reason; and three gave their reason as not being interested in school. Of the twenty-three who were either not interested, or gave no definite reason for withdrawing, 11 were doing failing work in one or more subjects at the time of their withdrawal, while 7 of these people were failing in two subjects.

Two senior boys were expelled for misconduct and both of these were doing failing work at the time.

A check was made to find out what the boys and girls were doing outside of school hours in the way of work, number of movies attended, and the number of hours per week spent either in the city or school libraries. It was found that the average

hours of outside work done by the boys was 4.1 hours per week, while the girls worked 5.4 hours. The boys, on an average, spent 2.5 hours per week in the libraries, while the girls spent an average of 3.1 hours. The average for the number of times per week in attendance at the movies was once for both boys and girls. Table 23 shows the amount of time spent in working, in the library, and at the theatres, in classes, for both boys and girls.

There is every reason to believe that the numbers in each class will remain about the same if extended over a period of years. The increase in the ninth and tenth grades is due mainly to three factors: One, an increase of transfer students from one- and two-year high schools located near Havre; second, as mentioned before, there is the desire on the part of some eighth-grade graduates to find work and, failing to do so, enroll a year later to help increase the number of ninth graders; and the greatest factor of all is the yearly enrollment of from 20 to 30 pupils who are graduates of the

local parochial school. Graph II shows the percentage each grade is of the entire school enrollment.

Graph II  
Percentage of Pupils of Each Age Enrolled in the Public  
Schools of Havre, Montana  
September, 1936



With the exception of the first graders who were five on September first, there is a fairly constant grouping as to



ages. By consulting Graph II, it can be seen that the enrollment by ages from six through thirteen is just slightly over seven per cent. The fourteen, fifteen, and sixteen year olds show an increase in the percentage of those groups to the total enrollment. The reasons for this increase has been explained in a previous paragraph. These three age groups correspond to the ages of those pupils who are normally in the ninth, tenth, and eleventh grades respectively. The seventeen-year olds again drop down to 7.2 per cent, which is about the same percentage that each age group in the grades is of the total enrollment. The eighteen-year olds are only 3.92 per cent of the entire school enrollment. Slightly more than one per cent of the entire enrollment is either under age or over age, which is a very small percentage and shows the ability of the schools to enroll and graduate the students at the proper age levels.

#### Needs of the Students

In order to find out whether or not the school was meeting the needs of the students, a questionnaire was filled out by each student, calling for the following information.

1. Do you intend to finish high school?
2. Do you intend to attend college?
3. What do your parents wish you to do upon graduation from high school or college?
4. What do you want to do upon graduation from college?

5. What is your favorite subject?

6. Which subject do you dislike the most?

Tables 17, 18, 19, and 20 show the number of boys and girls who answered the above questions, and the percentage for each group.

Table 17 Showing the Educational Aims of Havre High School Students. Percentages are those of The Total Who Answered the Questionnaire.

	Boys		Girls		Total	
	No.	Per Cent	No.	Per Cent	No.	Per Cent
Planning to finish High School	259	98.47	277	98.57	536	98.52
Not Planning to finish High School	4	1.53	4	1.43	8	1.48
Planning to attend College	153	57.73	192	67.49	345	62.61
Not Planning to Attend College	102	42.27	91	32.51	193	37.39

Table 18 Parents Choice of Occupation for High School Students. Percentages are those of the total who answered the questionnaire.

	Boys		Girls		Total	
	No.	Per Cent	No.	Per Cent	No.	Per Cent
Trades and Crafts	59	26.57	104	33.33	163	29.95
Unskilled Crafts	6	2.70	20	6.43	26	4.54
Professional	59	26.57	34	10.89	93	16.73
Business	34	15.32	52	16.66	86	15.98
Miscellaneous	5	2.26			5	2.26
Undecided	59	26.57	102	32.59	161	29.64

Table 19 High School Students Choice of Occupations

	Boys	Girls	Total
Agriculture	1	3	4
Artist	2	1	3
Aviation	26	6	32
Beautician	0	3	3
Business	15	8	23
Dentist	0	1	1
Doctor	5	3	8
Domestic Work	8	3	11
Draftsman	3	1	4
Dressmaking	1	2	3
Engineering	38	1	39
Lawyer	6	2	8
Lumbering	1	0	1
Musician	3	8	11
Miscellaneous	3	5	8
Nursing	0	30	30
Office Work	7	39	46
Stenography	2	78	80
Teaching	1	17	18
Telephone Operator	0	3	3
Undecided	49	70	119
Total			454

In answer to the questions regarding the subject liked most and the subject disliked most, many interesting answers were given. We shall not attempt to show the correlation between the scores made on the Sones-Merry Achievement Test and the likes and dislikes as to subjects, for boys and girls. A liking, or a dislike for, a certain subject is one of the important factors affecting the mark earned in any given subject field. Other factors tending to affect the mark received are the ability and skill of the instructor in presenting the subject material, the test used, native intelligence, and whether or not a subject is required or is an elective. Another important factor affecting the results of this survey

on likes and dislikes must be considered. This is whether or not a student has ever taken a particular subject. However, it is assumed that few have selected a subject as the one liked best who have never studied in the particular field. Many students, on the other hand, have checked a certain dislike; and, because of this attitude, have never enrolled in a given field and so have never learned to like it.

Table 20 Showing the Number of Boys and Girls Who Like Best and Most Dislike Certain Academic Subject Fields\*

	Subject Liked Best			Subject Disliked		
	Boys	Girls	Total	Boys	Girls	Total
Art and Music	11	28	39	17	2	19
Commercial Work	17	64	81	6	4	10
English	27	51	78	109	53	162
Industrial Arts	30	4	34	1	6	7
Languages	12	42	54	39	19	58
Mathematics	64	25	89	57	114	171
Natural Sciences	96	40	136	3	30	33
Social Sciences	20	11	31	16	41	57
Total	277	265	542	250	269	527

\*3 credits in English and one credit in Am. Hist. are required of all students.

Of all the eight subject fields, natural sciences were liked best by a total of 136 of the 542 pupils who answered the question. This is 25 per cent of the total number of pupils answering the questionnaire. Science is not a required course, but is usually taken by those who plan to attend a college or university. The four traditional sciences--general science, biology, physics, and chemistry--are offered in the Havre High School. Next year a new science course, known as

"Senior Science," will be offered. This course is to serve two purposes: the one, to offer a practical science course to those pupils who do not plant to attend college and who have not the native ability to carry one of the traditional sciences; the other, to offer a supplementary cultural science course to those who have had the other sciences. These two groups of pupils will have to be separated, as can be seen, for the ability and purpose of the two groups are quite different. Perhaps one reason for the choice of science by a larger percentage of students expressing their likes is because of the fact that these classes are handled by three very competent men teachers. Two of these men have Masters' Degrees in their special fields. Of the 595 pupils enrolled in high school the second semester, 259 or 42 per cent were enrolled in science courses. So 23 per cent of the entire enrollment prefer science to any other subject offered.

Mathematics was second among the subjects liked, with a total of 89 giving this subject field their first choice. This represents 18.3 per cent of the entire second semester enrollment, and 12.7 per cent of the students answering this question. The mathematics courses offered are general mathematics, algebra, plane geometry, advanced algebra, solid geometry and trigonometry. Mathematics is not a required subject, and all those who are not planning a college career and those who do not have sufficient ability are urged not

to take beginning algebra. Commercial subjects and English are a close third and fourth, with a total of 81 and 78 respectively selecting from these two subject fields the one best liked. Language ranks fifth, with a total of 54 students giving it their preference. The other three fields are about equal among the choices of the students.

By consulting Table 20, the likes and dislikes of the boys and girls can be compared. The number of boys liking science best was 96 compared to 40 girls who made this choice. However, among the girls commercial subjects are the favorite, with 64 giving them first place compared to only 17 for the boys. The number of boys who gave mathematics as their first choice was 64 as compared to 25 for the girls. The second ranking subject among the girls was English, with a total of 51 girls to 27 boys who like English best.

Similar comparisons for the rest of the subjects, as to likes and dislikes among the boys and girls, can be made.

Among the subjects listed as being disliked by the students of Favre High School, mathematics rated first place by 171 or about 32 per cent of the number answering the questionnaire, or 29 per cent of the entire enrollment. Thus the dislike for mathematics when the total enrollment and total number answering the question is 7 and 6 per cent higher than are the corresponding percentages for the number liking science best.

It may seem strange that a subject which was liked second best can be disliked the most. This is because of the fact that the likes were distributed among more subject fields in larger numbers, and that the dislikes were concentrated on mainly mathematics and English. Mathematics, while not a required subject, is taken by most students as a basic preparation for other subjects.

The number of girls who dislike mathematics outnumbers the boys who dislike this subject by a 2 to 1 ratio, with 114 girls disliking it most to a total of 57 boys.

English was disliked most by a total 162 pupils who answered the questionnaire. This is about 30 per cent of those answering this question and 27 per cent of the entire school enrollment. Here the order of dislikes among the boys and girls was reversed to those disliking mathematics with another 2 to 1 ratio. There were 109 boys and 53 girls who dislike English most. Language and social science were third and fourth respectively among dislikes, followed by science and commercial work in the regular academic subjects.

In fairness to English as a subject, and to the teachers of English, it must be remembered that all students are compelled to take English for three of their four years in high school. Another probable reason for students disliking this subject is because of the failure of many English departments to break away from the traditional practices in teaching and subject matter.

This pronounced condemnation of mathematics and English by about one third of the student body is a challenge to these departments and to the administration. Certainly there is a need for a change in the course of study, and perhaps a rejuvenation of the curriculum in regard to the courses offered. Too often the class room procedure follows the traditional methods for the three "R's" and a more practical application to life conditions needs to be followed in these two fields.

Table 21 shows the number and percentage of the 595 students of Havre High School enrolled in each subject field. English, physical education, and social science have the largest enrollments, principally because of the fact that the two are state requirements, and physical education a local requirement of all able-bodied students in the high school.

Table 21 The Number and Per Cent of Havre's 595 Students Enrolled in Each Subject Field

Subject Field	No. of Students Enrolled	% of Stud. En.
Art and Music	131	22%
Commercial Work	363	60%
English	593	99%
Industrial Arts	186	31%
Languages	268	45%
Mathematics	253	42%
Natural Sciences	259	42%
Physical Education	544	90%
Social Sciences	469	60%

It will be interesting to note that the two subjects, science and mathematics, which were listed first among the likes and dislikes, have the same percentage of students enrolled.



When a comparison was made between the number of boys and girls enrolled in each subject field, in the high-school curriculum, it was found that there was a greater proportion of boys than girls in all but two subjects. There were two more girls than boys enrolled in social science. A total of 184 girls to 182 boys were enrolled in these courses. The girls had a far greater enrollment in the commercial field, with a total of 151 to 66 boys. Table 21 gives the seven subject fields and the number of boys and girls, the percentage of boys and girls, and the ratio of girls to boys in each.

Table 22. Distribution of Boys and Girls in the Seven Subject Fields Taught in Havre--Percentage And Ratio of Girls to Boys

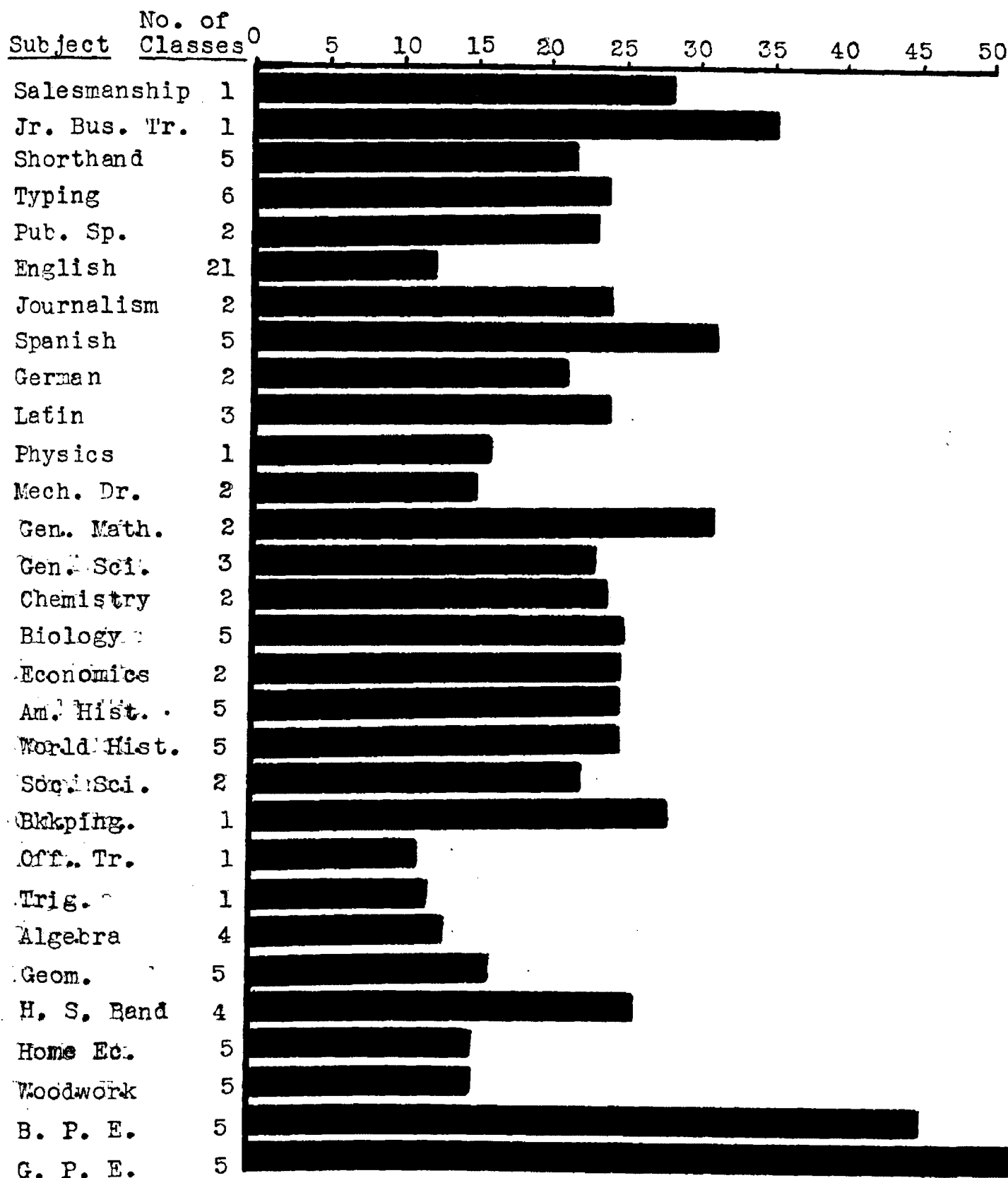
Subject Field	Girls	Boys	% of Boys	% of Girls	Ratio
Art and Music	54	54	54%	46%	1:1.13
English	266	277	51%	49%	1:1.04
Mathematics	107	145	58%	42%	1:1.35
Natural Science	98	144	60%	40%	1:1.46
Language	132	134	50%	50%	1:1.01
Social Science	184	182	50%	50%	1.01:1
Commercial Work	151	66	30%	70%	2.28:1
TOTAL	1065	1118	51%	49%	1:1.05

Such a distribution clearly shows that co-education is truly being carried on in the high school. Such classes as physical education, industrial arts, and home economics were not listed, as in their class there is little or no co-education.

Graph III

NUMBER AND AVERAGE SIZE OF HAVRE HIGH SCHOOL CLASSES

HAVRE, MONTANA - MARCH, 1937



Graph III shows the number and size of the various classes in Havre High School. Only three academic classes have an average enrollment of thirty and over, and two classes exceed the twenty-five pupil limit. This allows for more individual instruction than would be possible in larger classes. There are twenty-seven classes with an average enrollment of less than fifteen each. Twenty-one of these are in English, with algebra having four, and one each for trigonometry and office training.

Table 23. Number of Hours Per Week Spent on  
Outside Work, Attending the Movies,  
And At the Libraries.

	No. of Hours					Times Per Week					Hrs. Per Week Spent				
	Work Per Week					At the Movies					In Libraries				
	Hrs. None	Hrs. 1-5	Hrs. 6-10	Hrs. Above 10	Average	Hrs. None	Hrs. 1	Hrs. 2	Hrs. 3	Hrs. 4	Hrs. 5	Hrs. 6-10	Hrs. Above 10	Average	
BOYS:															
Freshmen	29	27	18	3		15	39	10	9	4	6	65	5	4	
Sophomore	22	24	16	4		15	51	12	3	0	7	73	2	0	
Juniors	17	19	8	0		6	30	10	0	0	6	36	0	0	
Seniors	9	23	14	7		13	30	8	2	1	7	39	6	1	
TOTAL:	77	93	56	14	4.11	49	150	40	14	5	26	213	13	5	2.5
GIRLS															
Freshmen	19	27	13	7		12	34	8	6	5	3	56	3	3	
Sophomore	18	31	27	9		13	49	21	2	1	7	75	3	1	
Juniors	16	19	15	17		19	38	7	1	0	8	45	5	7	
Seniors	11	3	20	16		14	32	8	2	2	1	52	5	0	
TOTAL:	64	60	75	49	5.4	58	153	44	11	8	19	228	16	11	3.1
Total for Boys & Girls	141	173	131	63	4.8	107	303	84	25	13	45	541	29	16	2.8

## Use of the Library by the High School Students

The girls spend slightly more hours per week in the library than do the boys. The average time spent in library work for the boys was 2.5 hours to 3.1 hours for the girls. Twenty-six boys and nineteen girls either never go to the libraries, or spend less than one hour per week there. By far the greatest number of students spend from one to five hours in the library, with a total of 541 coming into this group. The freshmen and sophomores among both the boys and girls spend the most time in the libraries and also at the movies. In an attempt to find out why the two lower classes spend more time in the library than did the two upper classes, some interesting reasons were found. The English, science, and social science teachers all assign more outside reading to the two lower classes than they do to the juniors and seniors. The librarian stated that the members of the two lower classes, on an average, require more time to complete an equal amount of work. This is due to poorer study habits, and also, perhaps, to a not knowing how to get by with less preparation and more bluffing.

## Educational Achievement

Perhaps the most significant measure of success of a school organization is found in the records of pupil achievement. Whenever the education objectives of a school system are adequate, clearly defined, designed along generally accepted educational ideals, and adapted to the particular needs

of the community, then the achievement of these objectives is the primary function of the school. The degree to which these objectives are achieved is a direct and positive measure of the success of the school.

No attempt will be made to pass judgment upon the adequacy of the educational objectives of the Havre High School. In another chapter of this thesis there is a discussion of the curriculum of the Havre High School. It will be assumed in this survey that the educational program is all that it should be, and an attempt will be made to find out how well the high school is doing the job it should be doing. To gain this end, the Sones--Harry Achievement tests were given to the juniors and seniors of the high school.

It is clearly recognized that no standardized test has been constructed which will measure all aspects of educational achievement. For many of the most important educational values, no test has yet been devised. The tests given tend only to measure the more formal aspects of the high-school educational program. These tests measure achievement in terms of knowledge of certain specific facts and skills. They make no attempt to measure other desirable habits, abilities, and attitudes which may be far more important to the educated citizen.

The Sones-Harry Achievement tests were given only to juniors and seniors as a matter of economy; and also, because it was thought that by measuring the achievement of those who are nearly finished with their high-school work, a fair measure

of the success of the school's functions could be secured. Special tests were given in four separate subject fields--English and literature, science, mathematics, and social science. While each member of the high-school body was given an intelligence test, no attempt has ever been made toward ability grouping.

The textbooks in use in the Havre High School are, with few exceptions, well chosen and generally satisfactory. As has been mentioned in a previous chapter, there is an abundance of supplementary material in use throughout the high school. In a later chapter, Radio and Visual Education will be discussed. Those classes and large-group activities of a social nature have use of a large auditorium.

### Standardized Tests

Standardized tests are not in general use in the high school. Individual teachers occasionally use such tests in their classes, but in no organized or controlled fashion. Most teachers make use of the Kansas Every Pupil Test, and a few use the Iowa Tests. While it is true that standardized tests have their limitations, and while they may be and are frequently misused, they may serve a very valuable purpose when properly used. They enable the individual teacher and the administrators to check up on the general effectiveness of one's teaching, and that of the school as a whole. These tests also enable the teacher to discover the probable deficiencies of individual pupils.

Little evidence was found of organized effort to correct individual pupil deficiencies in the Havre High Schools, although many teachers have done considerable along this line. The prevailing classroom instruction is the traditional type; that is, each class is taught as a unit. However, modern educational theory and practice demand that each pupil be treated as an individual. Lack of room and a lack of finances to employ sufficient teachers prevents the adoption of such a plan. The wide range of scores made on the Sones-Harry Achievement Tests shows that there is a great need for individual attention to overcome deficiencies.

### The Survey Test

The Survey Test has a recognized place in the high school in the evaluation of pupil achievement, for classification into more homogeneous groups, and for the analysis of the efficiency of the course of study, the staff, and the pupil. The Sones-Harry High School Achievement Test aims to serve the above purposes. It is based upon the principle that the student, as he advances through the secondary school, should be continuously adding to his fund of usable information. The student should not be judged solely by the credits he has earned in any one particular class. He should, rather, be judged on his ability to reason through new problems in the general subject-matter field, using the information already acquired. A fundamental assumption of the test is



that the student should have information to guide him in his reasoning; this information was gained by studying in a specific subject in the field. The last-named assumption was the one which determined the use of the test, in that it was given only to juniors, and seniors; however, it could have been used for the two lower classes, also. The prevailing practice in the secondary school is not to require a student to retain information gained in a subject or course after credit has been received. Many instructors and administrators do not even require a retention of information from one semester to the next. One function of this test is that it serves as a review to stress the need of more permanent learning.

### The Scope of the Test

The test covers the four fields usually required of students in the secondary school; namely, language and literature, mathematics, natural science, and social studies. No separation is made of the individual subjects taken in high school. The main attempt has been to sample as many parts of the four main fields of the secondary schools' basic curricula as is consistent with testing conditions and reliable measurements. The various sections of the test have been arranged in order of increasing average difficulty. The items in each section are also in order of increasing difficulty. Section A. is easier than Section B, and in each section item No. 1 is easier than item No. 2. In general, the student begins each

item and each section with the easiest question first. The range of difficulty ranges from grade 9B to seniors in college. The questions are so grouped that the pupils must consider the various phases of the subject matter as separate units.

### Validity and Reliability of the Test

The Sones-Harry High School Achievement Test is the result of several years of experimental work in connection with the Annual Academic Contest of the University of Pittsburg. All original questions were criticized and improved, eliminated, or approved by the various subject-matter specialists on the university staff prior to the first issue of the test. It was first given to 650 students entering the Academic Contest, and then revised. The revised tests were given to 100 practice-teaching college seniors in the school of Education of the University of Pittsburg. The test was then given to 750 suburban high-school students, after which it was again revised.

Irving A. Mather<sup>52</sup> made an independent extensive study of the validity of the test. He checked the validity by analysing textbooks, comparison with state course of study, teachers' marks and examinations, and the order of difficulty of the items. A summary of his findings:

"Seventy-nine to eighty-six per cent of the questions in English were actually found in the Oregon State textbooks; 97.5% of the mathematics questions, 92.5% of the

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52. Mather, Irving A. "Validity of Sones-Harry High School Achievement Test, Form A., for Use in Oregon." Thesis for M.S. Graduate School U. of Oregon, 1930.

science questions, and 94% of the social studies questions were actually in the textbooks.

"On the average over 50% of the items were arranged in order of difficulty from the easiest to the hardest. In regard to sections, an average of 55% of the ideal arrangement in order of difficulty was found. The English questions were arranged best, while the sections of the natural science test were in the best order of the four fields tested.

"The correlation coefficients between percentile ranking on the test and the teachers' grades from .42 to .68 and the total average correlation for the four subjects was .55, although the reliability of the teachers' marks ranged from .54 to .79.

"The probable errors of measurement are about 2.5 to 3 points on each part of the test. The data on the total test are based upon simple addition of the scores on the four parts without weighing the separate tests. The standard error of estimate is about 12 points, based on the 415 items of the test. Fifty per cent of the time pupil's "true" score would be within six points of his obtained score." 53

#### Achievement of High School Juniors

In all references to the four parts of the test, a number corresponding to the position of the part in the test will be used to identify a given part. No. I will refer to Mathematics, No. III to Natural Sciences, and No. IV to the Social Studies. Correlations will be made with the intelligence quotients of both the juniors and seniors, as taken from the Henmon-Nelson Intelligence Tests. Individuals will be used to serve as illustrations, as well as those students who plan to attend college and those who do not plan to attend college.

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53. Mather, Irving A. "Validity of Sones-Harry High School Achievement Test, Form A., for Use in Oregon." Thesis for M.S. Graduate School U. of Oregon, 1930.

Table 24 shows the number of percentile ranking and the scores made by the juniors in each part of the Sones-Harry Achievement Test. Since the test is designed to include college seniors, one would not expect to find many juniors in the upper percentiles. Not a single pupil scores in the 99 percentile in either Part I or Part II; however, three received a 99 percentile ranking in Part III, and two a similar rating in Part IV. On the other end of the scale we find three students being placed in the one percentile in language and literature, ten in the same for mathematics, two for science and one for social studies, respectively.

Table 24. Showing the Percentile, Grades made and the Number Making a Given Grade by the Juniors of Havre High School in the Four Parts of the Sones-Harry Achievement Tests.

Percentile	Language & Lit.		Mathematics		Natural Science		Social Studies		Total for 4 Pts.	
	Score	No. pupils	Score	No. pupils	Score	No. pupils	Score	No. pupils	Score	No. pupils
99	115-up	(0)	60-up	(0)	56-up	(3)	85-up	(2)	290	(0)
95	100-114	(0)	52-59	(1)	48-55	(5)	72-84	(5)	255-289	(1)
90	90-99	(1)	46-51	(5)	40-47	(19)	61-71	(13)	225-254	(7)
80	75-99	(7)	39-45	(7)	37-39	(7)	52-59	(12)	193-224	(8)
75	70-74	(1)	36-38	(8)	35-36	(7)	48-51	(7)	185-192	(6)
70	67-69	(7)	53-35	(4)	34-34	(2)	45-47	(11)	170-184	(6)
60	60-66	(11)	30-32	(9)	31-33	(17)	40-44	(10)	148-169	(20)
50	53-59	(20)	25-29	(17)	28-30	(5)	35-39	(20)	159-147	(12)
40	47-52	(8)	23-24	(13)	26-27	(4)	32-34	(8)	124-133	(18)
30	42-46	(14)	20-23	(19)	23-25	(13)	28-31	(10)	112-123	(13)
25	40-41	(9)	18-19	(7)	19-22	(18)	26-27	(5)	102-111	(3)
20	37-39	(6)	16-17	(2)	17-18	(5)	23-25	(4)	95-101	(5)
10	29-36	(27)	11-15	(18)	12-16	(11)	16-22	(10)	83-94	(9)
5	23-28	(6)	9-10	(4)	9-11	(5)	13-15	(5)	70-82	(6)
1	15-22	(3)	5-8	(10)	6-8	(2)	8-12	(1)	55-69	(4)

Table 25. Showing Percentile, Scores, and the Number of Seniors Scoring in Each Percentile Group

Percentiles	Language & Lit.		Mathematics		Natural Science		Social Science		Total for 4 Pts.	
	Score	No. pupils	Score	No. pupils	Score	No. pupils	Score	No. pupils	Score	No. pupils
99	120-		68-		64-		90-	(1)	300-	(2)
95	103-119	(2)	56-67	(2)	56-63	(3)	74-89	(3)	270-297	(5)
90	93-107	(2)	50-55	(4)	50-55	(15)	65-73	(15)	225-269	(8)
80	84-97	(10)	41-49	(11)	43-49	(16)	59-64	(11)	253-234	(1)
75	80-83	(3)	37-40	(6)	41-42	(7)	54-58	(7)	202-232	(13)
70	76-79	(5)	35-36	(6)	39-40	(9)	51-53	(3)	191-201	(5)
60	68-75	(10)	29-34	(13)	35-38	(16)	46-50	(3)	150-190	(13)
50	60-67	(18)	27-28	(9)	32-34	(16)	41-45	(14)	163-179	(16)
40	55-59	(12)	22-26	(21)	27-31	(18)	39-40	(9)	151-162	(9)
30	50-54	(11)	18-21	(12)	24-26	(7)	33-38	(16)	138-150	(12)
25	45-49	(13)	16-17	(2)	23-25	(2)	29-32	(7)	127-137	(10)
20	43-44	(1)	15-15	(4)	21-22	(2)	27-29	(1)	120-126	(7)
10	33-42	(24)	11-14	(12)	17-20	(7)	22-26	(9)	96-119	(16)
5	29-32	(5)	9-10	(5)	13-16	(7)	16-21	(5)	80-95	(6)
1	21-28	(6)	6-8	(3)	8-12	(2)	10-15	(1)	65-79	(2)

This wide spread in the achievement in the four subject fields indicates a great deal of difference in the preparation and the retention of information by the various members of the class. However, nine students were ranked in the upper quartile in language and literature, compared to 50 in the lower quartile, and 60 among the middle fifty per cent. In the natural sciences 41 juniors were ranked in the upper quartile, 37 in the lower quartile, and 41 in the middle fifty per cent. In the social studies 22 were ranked in the upper quartile, 23 in the lower quartile, and 59 among the middle 50 per cent.

As was shown in an earlier part of this chapter, students liked science best and mathematics second best; while they disliked mathematics most and English second. In the preceding paragraph, it will be noticed that nine students in English and twenty-one students in Mathematics ranked respectively in the upper quartile in achievement, while 41 ranked in this quartile in science--the subject best liked by a larger percentage of students. Here we notice that achievement and the liking for a subject show a high agreement.. Up to this stage in their education every junior and senior will have had from 5 to 7 semesters of work in English, while many have had only 3 semesters in science and mathematics. On the basis of time spent on preparation, English should rank first in achievement. It is not my purpose to attempt to offer any

reasons, other than those already given, as to the apparent reasons for achievement in the various subject fields.

Table 25 shows that only one senior was rated in the 99 percentile group in one of the four subject fields. However, two scored in this group when a total of the four individual tests was taken. An equal number scored in the lowest one percentile group.

When the scores made on the Sones-Harry Achievement Tests, by the Havre juniors and seniors, are compared with the scores made by over a thousand juniors and fifteen hundred seniors, they show that their achievement compares favorably on all parts of the test. Table 26 shows the scores made by a large number of juniors and seniors, and the scores made by the juniors and seniors of Havre High School. The scores for 11 B and 12B were used, as this corresponds to the amount of work completed by the Havre students at the time the tests were given. The scores of the 1015 juniors and the 1694 seniors were taken from a table given on Page nine of the Manual of Directions for the Sones-Harry Test.

The above comparisons were made with the standard norms given in the manual of directions for the test.



Table 26. Percentile Norms for 1015, 11B and 1694, 12B Students for the Separate Tests, and the Norms for the Havre Juniors and Seniors

Per- cent- ile	11B					12B					Havre 11B					Havre 12B					Per- cent- ile
	I*	II*	III*	IV*	T*	I	II	III	IV	T	I	II	III	IV	T	I	II	III	IV	T	
99	105	56	58	60	280	120	68	62	85	300	99	55	67	86	238	119	63	59	93	299	99
95	93	46	45	64	220	105	54	52	74	260	78	46	50	71	217	93	50	55	76	249	95
90	76	41	42	57	195	93	49	47	65	240	68	41	45	65	198	86	45	51	72	230	90
80	66	35	36	48	175	80	40	41	58	210	62	35	41	54	182	71	36	46	65	209	80
75	63	32	34	46	167	76	36	39	53	200	58	31	38	52	168	69	33	41	61	200	75
70	59	29	33	43	159	73	34	37	50	190	56	29	36	48	163	64	30	38	58	186	70
60	54	25	30	38	144	65	30	33	45	173	53	26	33	45	154	60	38	35	52	175	60
50	48	22	27	34	131	58	25	31	38	155	44	23	30	39	136	55	25	32	46	161	50
40	44	19	25	30	121	53	21	27	34	138	42	21	25	38	129	49	22	28	42	144	40
30	39	15	23	27	100	48	17	24	29	126	36	18	22	32	111	45	20	27	37	127	30
25	37	14	21	24	105	44	15	23	27	118	35	14	21	30	109	40	17	24	35	125	25
20	33	13	20	22	96	41	13	21	24	110	32	13	20	26	97	37	16	22	33	109	20
10	28	9	16	17	32	33	10	17	17	90	29	9	14	20	84	33	12	19	26	103	10
5	25	7	13	12	70	27	7	13	14	75	26	5	11	17	72	27	10	15	23	89	5
1	16	5	8	7	53	20	4	8	8	55	11	2	1	12	41	14	5	9	15	558	1
No. of cases	1015					1694					118					124					

\*Part I is Language and Literature; Part II, Mathematics; Part III, Natural Science;; Part IV, Social Studies; and T, the Total Test.

This table is read as follows: An 11 B student obtaining a score of 105 on Part I (Language and Literature) exceeds 99 per cent of the 1015 11B students on this test. An 11B student obtaining a score of 93 on Part I exceeds 95 per cent of 11B students on this test. A student scoring 46 on Part II (Mathematics) exceeds 95 per cent of 11B students on this test, etc.

The discrepancy between the percentile norms for the total score and the average of the percentiles for the four separate parts is due chiefly to the fact that the number of questions differs for the four parts, and the total score is the sum of these four separate scores. The total scores percentiles are therefore weighted, to some extent, according to the number of questions in each part.

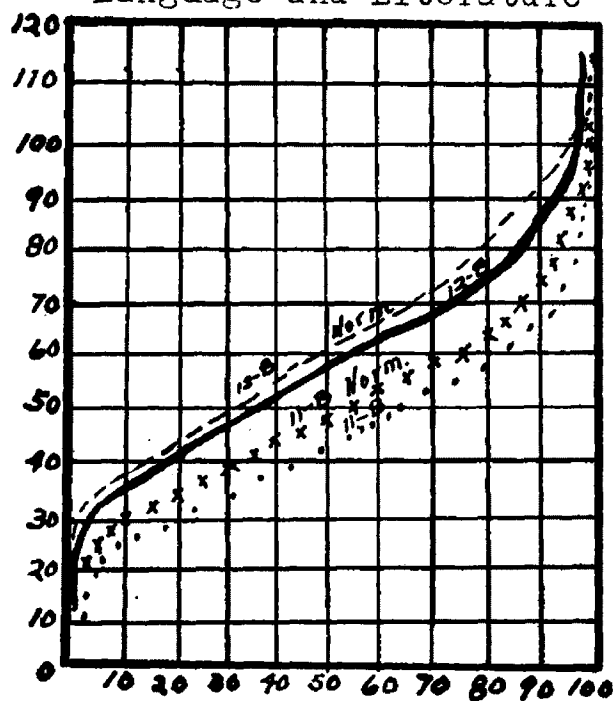
The Median Total for the 1015 11B students was 131 compared to 136 as a median total for Havre juniors; whereas, the median total for 1694 12B students was 155 compared to 161 for the Havre seniors. In the 99 percentile group Havre's juniors scored a total of 283 compared to 280 for the standard norm, while the Havre seniors in the same percentile group fell one point below the standard norm. In the 75 percentile group the total scores for the large group and the total scores for the Havre juniors and seniors were about the same, with a score of 168 and 200 respectively. In the lower quartile, the scores for the Havre juniors and seniors were five and seven points higher than the total scores made in the large

group. In the one percentile group, Havre's juniors were 12 points lower than the norm for the large group, while the Havre seniors were three points higher than one per cent of the 1694 11B students.

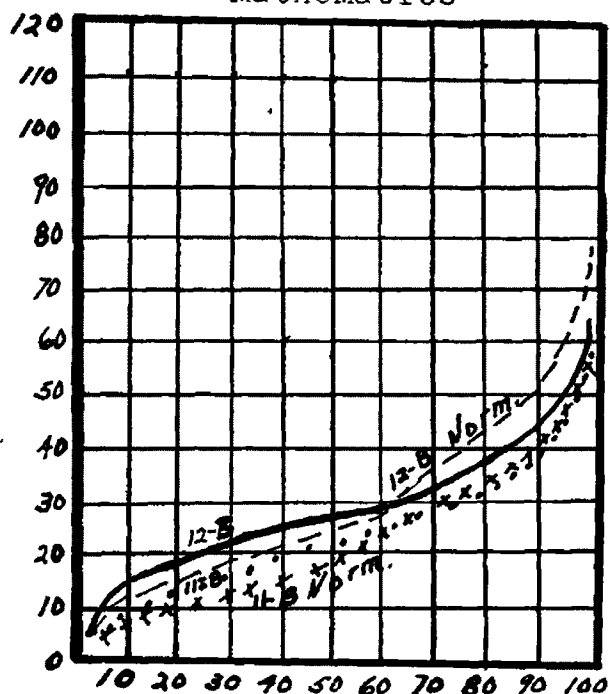
### Percentile Groups

To compare the score of any pupil with the scores of his own grade or the high school as a whole, the most effective method is to draw a percentile curve for each grade or high school on a percentile graph. A percentile curve shows at a glance the median score of a class, and also the variability of the scores. When the curves of the two classes are put on the same graph, the amount of overlapping can be shown very plainly. Certain factors may cause comparison only within a school to be better than comparison with other schools. A school may at the time be judged unfairly by outside standards because of differences in ability of students, types of courses offered, the lack of study facilities, and non-use of objective tests. In this study comparisons are only used as a means of illustration and for general use, and no attempt is made to rank the students or the school on the basis of the test results.

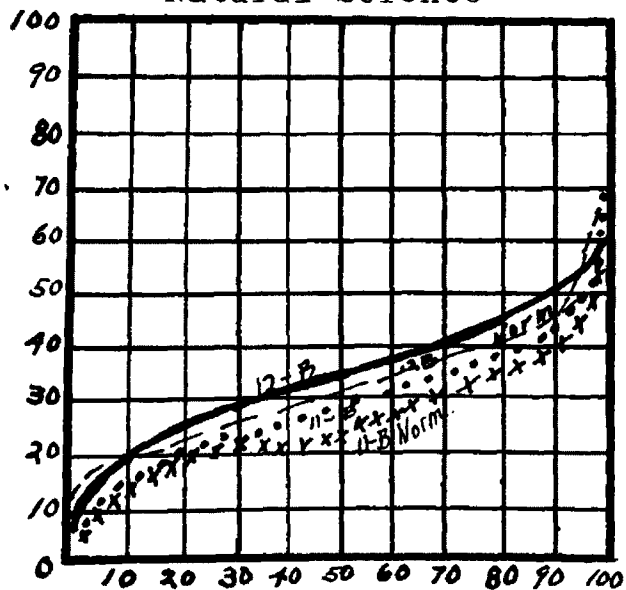
Graph I  
Language and Literature



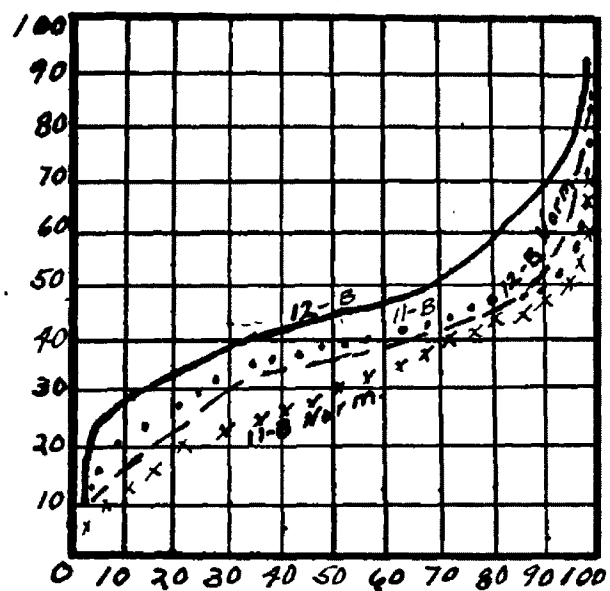
Graph II  
Mathematics



Graph III  
Natural Science



Graph IV  
Social Science



By consulting the percentile graphs, it can be seen that the percentile curves for the juniors and seniors parallel each other quite closely in all four parts of the test. The greatest spread occurs in Part I, Language and Literature. This, no doubt, is due to the fact that juniors have not as yet studied literature, while the seniors have had at least one semester's work in this subject. The same is true to a small extent for the curves on the social sciences. Most seniors will have had some work in economics and sociology; whereas, the juniors have merely studied world and American history.

This paralleling of achievement is as it should be, and shows a normal amount of improvement between the junior and senior years. In only one case did the percentile curves cross, and that was in natural science in which test a junior scored a total of 67 points. This is one point below the best score made by the 1694 seniors who took the test, and from which results the standard norm was figured. This student is superior in this subject field, as is shown by the fact that he placed second in the state scholarship contest in chemistry, and scored a total of 90 out of a possible 102 points on the Kansas Every-Pupil Test. His I. Q. Score on the Hemmon-Nelson Test was 118.

### Achievements of Havre Graduates

Another test of ability of a school to adequately prepare its students is shown, to some extent, by the success of those students who continue their education after graduation from high school. A fairly accurate test of the success, on the parts of the students, can be obtained from the marks received by these students in the various colleges. Since these marks represent a period of eleven years, from many universities and colleges, it should show how well they have been prepared in high school--to some extent.

The data given in the above paragraph and that in table 27 were gathered from the files in the office of the high school principal. It has been the custom of administration to secure the quarterly marks of the high school graduates and to compile and file these marks.

Table 27. Ranking of Havre High School Graduates Who Attended Various Colleges During the Years 1926-1937.

TIME IN ATTENDANCE		A	B	C	D	E*	F*	G*	H*	I*
2d quarter 1926		7	1	5		1				
1st " 1929-30		9	44	51	20	2	5		1	6
2d " 1930		15	44	41	20	1	4		1	4
3d " 1930		16	30	44	24		4		4	3
1st " 1930-31		35	68	81	29	8	5			
2d " 1931		34	67	90	32	3	6		4	2
3d " 1931		32	64	87	18	1	3			4
1st " 1931-32		43	72	127	40	4	2		10	4
2d " 1932		46	83	105	19	3	1		5	5
3d " 1932		42	61	83	30		1		4	
1st " 1932-33		49	100	133	53	1	7		4	17
2d " 1933		46	91	113	29	2	6		4	3
3d " 1933		46	94	123	32		3			6
1st " 1933-34		39	87	119	37	2	3		20	6
2d " 1934		43	99	116	27	2	6		6	4
3d " 1934		30	75	137	40	1	6		1	2
1st " 1934-35		18	82	103	39	7	5		4	5
2d " 1935		26	55	113	25	2	15		9	5
3d " 1935		23	72	139	43	6	2		11	13
1st " 1935-36		22	45	23	22		3		4	
2d " 1936		24	76	118	51	5	18		5	4
3d " 1936		22	63	112	40		10		22	1
1st " 1936-37		39	102	131	62	5	6		7	4
2d " 1937		54	69	117	50	7	13		9	6
TOTALS		765	1644	2309	762	63	134		135	100
%		13%	28%	39%	13%	1%	2%		2%	2%

E\* - Condition; F\* - Failure; G\* - Withdrawn before credit was given;  
 I\* - Incomplete.

Table 27 shows the date of attendance, the distribution of marks, and what percentage each mark given is of the total of 5912 marks recorded. Thirteen percent of those attending college received a mark of "A", and a similar percentage received "D's". Twenty-eight per cent received "B's", and 39 per cent earned "C's". The rest of the marks together only totaled seven per cent, with only one per cent failure. Many factors enter into the earning of college marks, but not the least important is that of an adequate high-school preparation. By referring to Table 28, showing the I.Q.'s of those juniors and seniors who plan to attend college, it can be predicted with fair accuracy that the graduates will continue to do well in their college work. Only two of those choosing a college education have I.Q.'s which would probably predict failure. However, both these are juniors and may change their minds concerning college entrance before they are graduated from high school.

Comparison of Educational Aims and I.Q.'s  
Of the Juniors and Seniors

When the scores on the four parts of the test were counted for each student, only 22 of the juniors ranked in the upper quartile, with 27 being placed in the lower quartile, and 69 grouped in the middle fifty per cent. According to the I.Q. scores obtained from the Henmon-Nelson Intelligence Test, six of the juniors scored less than 80 points, while four scored



more than 120 points. Tables 28 and 29 give the I.Q. scores for the juniors and seniors. Table 28 gives the I.Q. scores for those juniors and seniors who do not plan on attending college. The greatest number of juniors scores between 90-110 points was 32 who plan on attending college; 20 who do not plan on attending college have scored in this range.

Table 28. Pupils in 11 and 12 grades of Havre High School Who Expect to Go to College  
Grouped according to I.Q.

I.Q.	Grade 11	Grade 12	Total
60-69	1	0	1
70-79	1	0	1
80-89	5	3	8
90-110	32	20	52
111-120	28	26	54
121-140	4	2	6
140 plus	0	0	0
TOTAL	71	51	122

**Table 29.** Pupils in 11 and 12 grades of Havre High School Who Do Not Expect to Go to College, Grouped According to I.Q.

I.Q.	Grade 11	Grade 12	Total
60-69	0	0	0
70-79	4	2	6
80-89	8	5	13
90-110	20	19	39
111-120	8	7	15
121-140	0	0	0
140 plus	0	0	0
<b>TOTAL</b>	<b>40</b>	<b>33</b>	<b>73</b>

By consulting tables 28 and 29, it can readily be seen that a total of 106 or 87% of the juniors and seniors who plan to attend college have an I.Q. ranging from 90 to 120, while 54 or 74% of those not planning to attend college come within this range. A slightly greater percentage of the juniors who plan to attend college ranked between 90 and 120, while about the same per cent of juniors and seniors who plan on attending college come within this range of scores.

#### A Testing Program For the High School

The results of this survey show that the High School, as a whole, is doing its part to prepare its students for their places in life. However, there are several phases of the administration of the High School that can and should

be improved so that its students will be better fitted to take their places in society.

1. A periodic check-up on the status of the school through the use of tests and the analysis of needs and abilities of the students.

2. The development of a testing program which will assist in the guidance of individuals, both vocationally and educationally.

3. The supplying of vocational and educational information and the addition of a qualified part-time educational and vocational guidance director.

4. A systematic use should be made of the results of the intelligence tests in dealing with individual differences, so that time wasted because of failure in a given subject may be cut to a minimum.

## CHAPTER VI

### THE PROFESSIONAL PERSONNEL OF THE HAVRE HIGH SCHOOL

The greatest factor bearing upon the quality of educational service rendered to the students of a high school is the influence of the professional personnel with whom they come in contact during their four years in attendance. The best plant in the state would be of little value without an efficient administrative, supervisory, and teaching personnel. A well planned and executed program of instructional supervision will do much to improve the quality of the teaching service, as well as to establish a healthful professional attitude. The methods of personnel administration in education still fall far short of being scientific. There are, however, certain standards which experience has clearly shown are of importance in securing a well-qualified teaching staff. It is doubtful if anyone can teach anyone anything; the teacher can only stimulate the pupil to learn and provide the desirable environmental conditions. With this conception of education, it is increasingly important that the personal and professional qualifications of the teacher be fundamental to the adequate growth of the students.

#### Professional Training of the Staff

An important factor in the quality of a teaching staff is the amount and character of its professional training. The sum total of knowledge is very large, and is constantly growing; and much of it is directly applicable to the education of the present-day high school youth. With an ever increasing enrollment

of a rather heterogeneous group of young people, in the modern high school, it becomes paramount to have a staff who have been schooled in the modern educational philosophy. No poorly prepared teacher should be allowed to gain knowledge and skill by practicing on the students.

The lowest acceptable standard as to amount of training for a high-school teacher is four years beyond a high-school education; and four, and preferably five, for supervisors and principals. A growing number of communities throughout the country demand a higher standard of preparation and experience.

In the Havre High School, the teachers and principal all reach the above-stated minimum. The superintendent also has exceeded this minimum, and is receiving a Master's degree in education. The facts concerning training of the high-school staff are given in Table 30.

TABLE 30. Distribution of Havre High School Teachers According to Training Above High School - 1936-1937. (One Quarter is Equal to One Third of a Year.)

Training Above High School	Teachers	Principal	Special Teachers	Total
3 years	1		1	1
4 years	2		1	2
4 1/3 years	4			5
5 years	10	1	1	12
6 years	8			8
7 years or more	1			1
Masters Degrees	5			5
Work Above Masters	1			1

The median group as to education is that part of the staff who have had five years of training above high school. It is significant that nine teachers of the total 28 have had six years of education above high school, with five of those holding

masters degrees. Seventeen teachers have continued their educational work during the last two years by attending summer sessions. This fact shows desire on the part of the teachers to keep abreast with the ever-increasing growth of knowledge and scientific training.

An examination of the work taken at the various summer sessions showed that the teachers were gaining new facts in their respective subject fields, as well as doing special work in educational subjects.

Many progressive communities grant teachers of long experience a sabbatical leave of absence with part pay. Others reimburse the teachers in the form of a raise in salary for each quarter's work done while in their employment. Havre falls short in this respect, for no salary schedule is operative which grants a leave with part-time pay, or makes any provision for additional training. Teaching experience under conditions which encourage professional growth is an essential part of the training of superior teachers. Teachers who have had a thorough pre-service training do not reach a high plane of efficiency until after several years of experience in a system. While a school should select its share of inexperienced teachers, it should also strive to retain its experienced teachers, as well as attract experienced teachers of special abilities.

#### Experience of Havre's High School Teachers

Table 31 shows the amount of teaching experience of the Havre High School teachers, as well as the number of years of service in the local schools. The median number of years of experience

for the group is nine years. The median number of years experience for the high-school teachers in the Havre system is six years.

TABLE 31. Distribution of the Havre High School Teachers According to Years of Teaching Experience and Years of Experience in Havre. May, 1937

Total Years Experience	Number	Years Experience in Havre	Number
1 year	1	1 year	7
2 years	0	2 years	2
3 "	3	3 "	3
4 "	2	4 "	1
5 "	2	5 "	0
6 "	2	6 "	2
7 "	3	7 "	2
8 "	0	8 "	2
9 "	2	9 "	1
10 "	0	10 "	4
11 "	2	14 "	2
12 "	2		
13 "	3		
14 "	1		
16 "	1		
24 "	1		
28 "	1		
TOTAL	26		26
MEDIAN	9		6

These figures indicate that most of the teachers have spent about two-thirds of their professional life in Havre. It is a wise policy to attract mature teachers from other school systems, particularly if they are carefully chosen at the outset and are kept professionally alive after their appointment. Within the past two years, 9 teachers were added to the local staff and of this number 5 plan to attend summer sessions during the summer of 1937.

#### Age of Havre High-School Teachers

The median age of all Havre High School teachers is 31 years. These figures agree with those on experience, and indicate that the high school-staff is composed of a group in which maturity

and experience is balanced with youthful energy and enthusiasm. A well balanced faculty as to age and experience will enable the students to gain a great deal from their daily contacts with their instructors. All of the teachers have had enough experience to avoid the common mistakes made by a beginning teacher, and yet are not so far advanced as to lose the students' point of view in the many activities of a present-day high school. Professionally, a large proportion of the teachers are quite young. This spirit of youth is maintained by continuing their own education during the summer months, and through participation in the extracurricular activities of the school.

### Teacher Turnover

The teacher turnover in the Havre High School at the end of the 1936 school term was 25% of the entire staff. Two new departments were added, each requiring the services of a new teacher. This means that one of every four teachers of the previous year withdrew from service. The median age for the new teachers involved in this turnover was 28 years.

All of the new teachers who figured in the turnover, as well as the new additions, have had at least three years of successful teaching experience prior to coming to Havre.

The turnover for teachers in the high school represents a high rate. High turnover of personnel in business is usually quite costly, not in the matter of salary but in the time lost in making the necessary adjustments. Financially it represents a saving to the district, as all the incoming teachers started at the minimum salary, according to the schedule; whereas, those



leaving the system had reached a considerably higher place on the salary scale. A more attractive salary schedule would tend to decrease this high rate of turnover. Generally speaking, Havre offers as many other advantages, usually sought by teachers, as do any of the other large schools in the state, with the possible exception of the four largest cities.

### Proportion of Men Teachers

There is no scientific justification for the preference of one sex over another as teachers. It is however, generally believed that both men and women make a very definite contribution and that it is especially desirable to bring the older high-school boys in contact with capable men teachers. Many administrators have expressed a preference for men teachers, as they are generally more stable emotionally; and, if married, contribute more to the community activities. The schools, as a whole, have been unable to retain experienced and capable married men teachers in service. This is principally because of the inability or unwillingness of a community to offer salaries comparable to those of other professions and trades. If the schools wish to attract men of outstanding ability, and this certainly must come about if schools are to fill the place they should in the preparation of the youth of the country, they will have to offer more attractive salary schedules and a more secure tenure.

The proportion of men teachers in the Havre High School is far above the average for the United States. In the country, as a whole, 16.8 per cent of the teaching staff, exclusive of principals and supervisors are men.<sup>1</sup> In Havre the percentage of

<sup>1</sup> Strayer, Geo. D., Director: Survey of the Schools of Watertown, Massachusetts. Bureau of Publications, Teachers College, Columbia University, 1931, p. 182.

men teachers of the entire staff is 46.2 per cent. Only two of the twelve men teachers are single.

### Married Women Teachers

Havre, in common with the majority of cities of its size, does not employ married women teachers. This policy is universally the result of a mistaken idea that considerations other than fitness to teach children should govern the selection of the members of a high-school staff. There is no real, valid reason why a reasonable proportion of carefully selected married women should not be desired. The general objection is the providing of a position to a woman who is not the sole wage earner in the family. However, other professions and businesses do not make this same distinction. There is no accepted evidence available that married women neglect or show a lack of interest in their work. There is no valid reason for making an exception to the prime criteria for the selection of teachers, that of their fitness to teach.

### Home Town Teachers

In some communities political pressure is brought to bear upon the Board of Education, resulting in election of an undue proportion of "home teachers." The result is an in-breeding process which tends towards professional stagnation. Some communities go to the other extreme, and refuse to hire anyone who might in any way be branded a "home teacher." Havre has no definite policy as to home teachers. At present there are three women and one man teaching in the high school who attended school at Havre, and whose parents still reside in the city. Two of the other men teachers are married to local girls. The home-town

teachers all received their college education at different institutions, and in this way have removed the objection to in-breeding in this respect. These home teachers have caused no embarrassing situations to date, and do their part in cooperating with the administration in all school affairs. Havre should continue the policy of selecting the best qualified teachers, regardless of residence at the time of appointment.

### Importance of a Salary Schedule

The one factor which probably influences the character of the teaching staff more than any other is the salary schedule. It is true that no teacher can ever be paid in "gold" for the services rendered the youth of a community. However, the preparation of, and the continued professional training of, a teacher is expensive. It is also essential that a teacher maintain a standard of living well above the level of a mere subsistence in order to do his work effectively. He is expected to live under conditions which make for physical and mental health. In the Havre schools each teacher, at the beginning of the 1936 year, was required to have a thorough medical examination. He is expected to dress neatly, keep professionally awake by subscribing to professional literature and by attendance at conventions and summer schools. He is expected to contribute to the many worthwhile charitable and public causes. To handle this latter matter, a plan is now under consideration whereby each teacher will contribute a certain sum to the local chapter of the M. E. A., which will in turn prorate and distribute the funds from this common chest to all worthy charitable and public causes. This will make for ease of handling,

and do away with the constant "pestering" of the teachers by solicitors for community needs. It will also assure equal recognition of all worthwhile causes by the members of the high-school staff.

The teacher should be a person possessed of ability and a wholesome personality. He should so live in a community as to set an example for the growing youth, and hence should be able to properly interpret life to the children with whom he comes in contact.

The Havre Board of Education has constantly kept in mind the need for a better salary schedule, and has revised such a schedule to fit current conditions. Like most Montana communities, it is always a problem to obtain adequate revenue to effectively operate the schools. The local board realizes that skilled teachers cannot be obtained for low wages, but has no well planned salary schedule. Without a schedule which is carefully followed, the salaries paid the staff are likely to be the result of chance factors; and are the basis of much dissatisfaction on the part of the individual within a system. Havre has not an adequate salary schedule in operation which takes into consideration the various factors upon which the price of a teacher's services should be based. The Board has a plan under consideration, at the present time, which would make allowance for training, professional growth, experience, and standard of living. A decrease in the valuation of taxable property makes its adoption doubtful for the coming year.

#### Teachers' Salaries in Havre

There are a number of criteria which enterprising communities

use in determining the salaries paid to their teachers.

Two of the most common of these are the comparison with other salaries of the community and a comparison with the teachers' salaries of comparable communities. The present salary schedule was adopted during the school year of 1931.

The data given in Table 32 was taken from the Research Bulletin of the National Education Association, March, 1937. It is encouraging to note that salaries are beginning to return to pre-depression levels. Salaries were about from 10 to 20 per cent lower in 1934-35 than they were in 1930-31. The largest reductions were in cities under 10,000. There is indication of an upward trend in salaries for 1936-37. In many cities the medians are still below those of 1932-33.

TABLE 32. Trends in Salaries Paid Employees in High Schools in Cities 5,000 to 10,000 in Population, 1930-31 to 1936-37\*.

Type of Employee	Median Salary Paid in				Per Cent of Change		
	30-31	32-33	34-35	36-37	31-37	33-37	35-37
Class Room Teachers	\$1692	\$1575	\$1379	\$1490	-11.94	-5.40	+8.05
Principals	2825	2603	2235	2517	-10.90	-3.30	+12.62
Superintendents	4188	3818	3440	3643	-13.01	-4.58	+5.90
Dir. of Phys. Ed.	1184	1719	1585	1663	-11.73	-3.26	+4.92
Secretaries to Supt.	1192	1079	946	1037	-13.00	-3.89	+9.62
Janitors	1275	1144	969	1068	-16.24	-6.64	+10.22

\* Research Bulletin of National Education Association, Vol. XV., No. 2, March, 1937.

Table 33 shows the median salaries paid similar employees in the Havre High School for the corresponding period. It will be noticed that Havre ranked slightly below the medians for the country as a whole in respect to salaries paid. The median salary for high school teachers for the state of Montana during the school year of 1936-37 was \$1533.

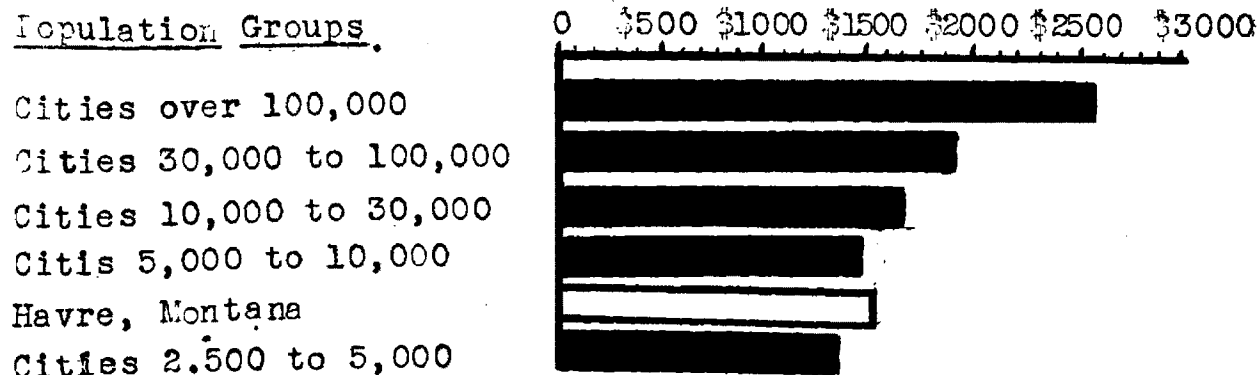
TABLE 33. Salaries Paid Havre High School Employees 1930-31 to 1936-37.

Type of Employee	Median salary Paid in					Per Cent of change		
	30-31	31-32	33-34	34-35	35-37	31-37	33-37	35-37
Class Room Teachers	\$1700	\$1662	\$1260	\$1350	\$1540	-9.41	+22.22	+14.8
Principal	1950	2000	1575	1800	2100	+7.13	+25.0	+14.3
Dir. of Ath. & P.E.	1413	1500	1305	1530	1800	-2.04	+25.9	+15.5
Secretary to Supt.	1140	1140	1200	1200	1200	-5.0	-5.0	00.0
Janitors	1350	1500	1020	1200	1620	-16.67	-37.0	+25.9

Table 33 shows a decrease of 11.94 per cent for the median salaries for 1936-37 under the 1930-31 salaries for high school teachers for the country as a whole. In Table 33 it can be seen that the decrease for the Havre High School teachers was slightly less, being only 9.41 per cent. The percentage of increase in salaries in 1936-37 over the year 1935 for the nation was 8.05 per cent, whereas the Havre teachers' salaries have increased 14.8 per cent. This, however, still leaves a considerable gain to be made so that the median will again be up to where it was in 1931.

Graph 8 shows a graphic representation of the median salaries for high school teachers in cities for the country as a whole, and the median of the Havre High School teachers for the year 1936.

Graph I. Median Salaries Paid High School Teachers in Cities, 1936-37.



The median salaries for high school teachers in cities for the country as a whole, during the school year of 1936-37, was \$1490. The median for the Havre High School was slightly higher, being \$1540. The median salary paid high school principals in cities of a comparable size for the country was \$2517; whereas, the principal's salary at Havre was \$2100.

#### Current Salary Schedule

As mentioned before in this chapter, Havre has a very flexible salary schedule, with the minimum salary being determined merely by the number of years training received above an A.B. degree. There is no provision made for additional experience received prior to election in the Havre system. An annual increase of \$50 may be given until a maximum salary is reached.

TABLE 34. Havre High School Salary Schedule, 1931-1937.

Years of Training and Experience	Minimum Salary	Annual Increase	Maximum Salary	Super- Maximum
A. B. Degree - 2 yrs.	\$1400	\$50	\$1750	
A. B. Degree - 4 yrs.	1450	50	1900	Variable
M. A. Degree	1500	50	1900	

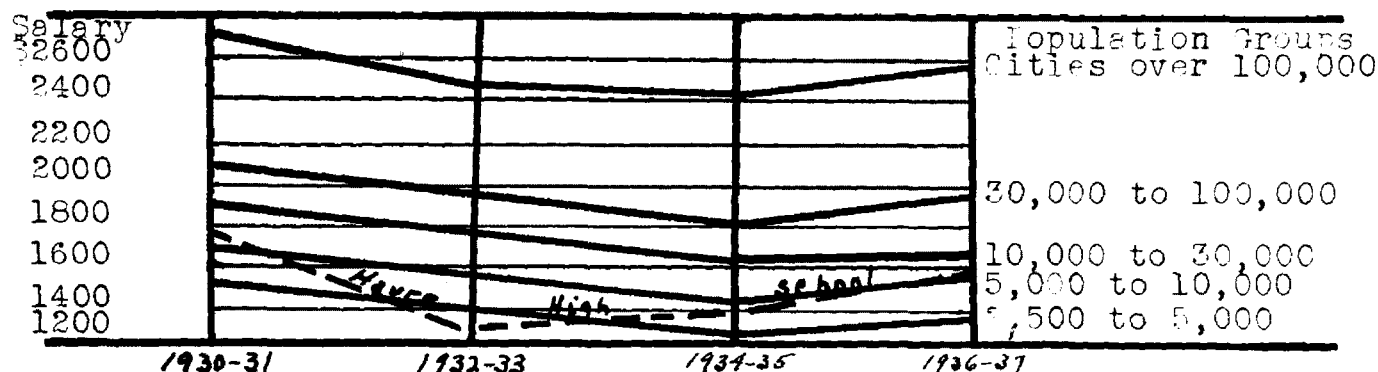
All teachers must have 2 or more years of experience prior to being selected for a position in Havre. The maximum salary is not given unless the teacher attains an "A" rating the year preceding the year in which she is entitled to the maximum salary. The yearly salary is divided into twelve equal payments; the teachers receive the last four months' salary in one final payment.

#### Proposed Salary Schedule

The salary schedule given in Table 35 is now up for consideration before the Board of Education. There is little chance of

its adoption until the revenue of the district increases. The only source of revenue at present is a 9 mill county tax. It will be noticed that in the new salary schedule provisions are made for an increase based upon training and experience. The maximum, or highest salary, is perhaps most influential in recruiting and holding competent teachers. The adoption of this schedule would require an additional \$25,000 to put it into effect. This, under present conditions, would put the percentage of the operating expenses up to about 95% of the total cost.

GRAPH 9. Trends in High School Teacher's Salaries, 1930-31 to 1936-37.\*



\*Data secured from Research Bulletin of Nat'l Edu. Assn., May, 1937.

### Teachers' Salaries and Standard of Living

The general practice of a community in paying its teachers should be considered from the manner in which it meets an increase in the cost of living standards. Standards of living generally increase with an increase in the productivity of the country. There has been a very definite increase in the standard of living the past twenty years. The increase in the typical income has been more than enough to offset the higher cost of living. Table 36 shows the average cost of living over a five-year period for the Havre Special and Senior High School teachers. This survey covered years from 1932-36. It can readily be seen that the



TABLE 35. Proposed Monthly Salary Schedule for Teachers.

## Classification and Training.

Class	1				2			3		4
Sem. Hrs. 90	105	120	135	150	165	180	195	210	225	
Years	2	$2\frac{1}{3}$	$2\frac{2}{3}$	3	$3\frac{1}{3}$	$3\frac{2}{3}$	4	$4\frac{1}{3}$	$4\frac{2}{3}$	5
Years of Teaching Experience										
1	\$ 75	\$79	\$83	\$87	\$91	\$95	\$100	\$105	\$110	\$115
2	80	84	88	92	96	100	105	110	115	120
3	85	89	93	97	101	105	110	115	120	125
4	90	94	98	105	106	110	115	120	125	130
5	95	99	103	107	111	115	120	125	130	135
6	100	104	108	112	116	120	125	130	135	140
7	105	109	113	117	120	125	130	135	140	145
8	110	114	118	122	126	130	135	140	145	150
9	115	119	123	127	131	135	140	145	150	155
10	120	124	128	132	136	140	145	150	155	160
11	125	129	133	137	141	145	150	155	160	165
12	(1500)	(1548)	(1596)	142	146	150	155	160	165	170
13				(1704)	(1752)	(1800)	160	165	170	175
14							(1920)	(1980)	(2040)	180
15							Super-Maximum			185
										2220

Teaching principal receives yearly teaching salaries as follows:

School with 3 teachers or less, \$45; 4 to 6 teachers, \$90;

7 or more teachers, \$135.

average expenditures in many cases were more than the median salaries for a similar period. This is a result of being underpaid, rather than a case of extravagant living. The standard of living which a teacher has to maintain is generally rather high. Such a situation is not conducive to general good physical and mental health, and is very likely to lower one's efficiency.

TABLE 36. Annual Expenditures of Havre Teachers For a Twelve-Month Period

	Women	Single Men	Married Men
Food	\$211.25	\$347.66	\$476.44
Housing or Rent	156.87	255.00	489.79
Laundry	20.53	66.65	14.88
Clothing	238.27	145.00	191.55
Health and Care of Person	70.42	37.33	110.86
Transportation, auto expense	105.10	78.33	140.00
Recreations, entertainment	32.66	58.33	53.17
*Summer School	217.50	110.00	49.44
*Other professional improvement (magazines, books, extension training)	22.14	31.16	20.71
*Education and culture (music lessons, travel, etc.)	84.17	50.00	24.55
Insurance	145.43	138.93	185.76
Savings	58.45	66.00	36.53
Miscellaneous	136.85	279.33	131.86
TOTAL	\$1489.64	\$1667.72	\$1925.41

\*Average for the last five years.

Average earnings per year during the vacation period for the past five years, 1932-36	26.83	61.66	109.44
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In answer to a questionnaire sent out concerning the cost of two items, board and room for single teachers and household expenses for married teachers for the year 1936-37, the following results were obtained. The average cost for the above two items for the 9 married teachers was \$86 per month, or a total of \$1032 per year. This is about two-thirds of the 1936-37 median salary. The expenses for the 18 single teachers was \$43 per month, or a total of \$516 a year, which is about 1/3 of the median of the 1936-37 salary. The above data was secured by questionnaire.

The following quotation was taken from a Research Bulletin, "The Teacher's Economic Position," Research Division, National Education Association, 1935, page 5.

"The economic status of any teacher is naturally of major personal concern to that teacher. The economic status of teachers as a group is, or should be, a matter of fundamental professional concern to all educators and to parents and citizens generally. From the purely personal point of view, a satisfactory economic status is important because it means having the necessities of life in sufficient amounts for one's self and dependents, a reasonable amount for giving to worthy causes outside one's own household, ample opportunity for wholesome recreation and for cultural and professional growth, and a chance to make adequate provision for future emergencies and for retirement. From the strictly professional point of view, these things are important because they help to maintain the morale of teachers and to improve generally the efficiency of our schools. The profession of education may well give even more careful consideration than in the past, to the economic conditions and problems of its members and to ways of getting other citizens to do the same. This is essential to the well being of one's society's most potentially valuable groups, and hence essential to the effectiveness of the work which society expects this group to do."

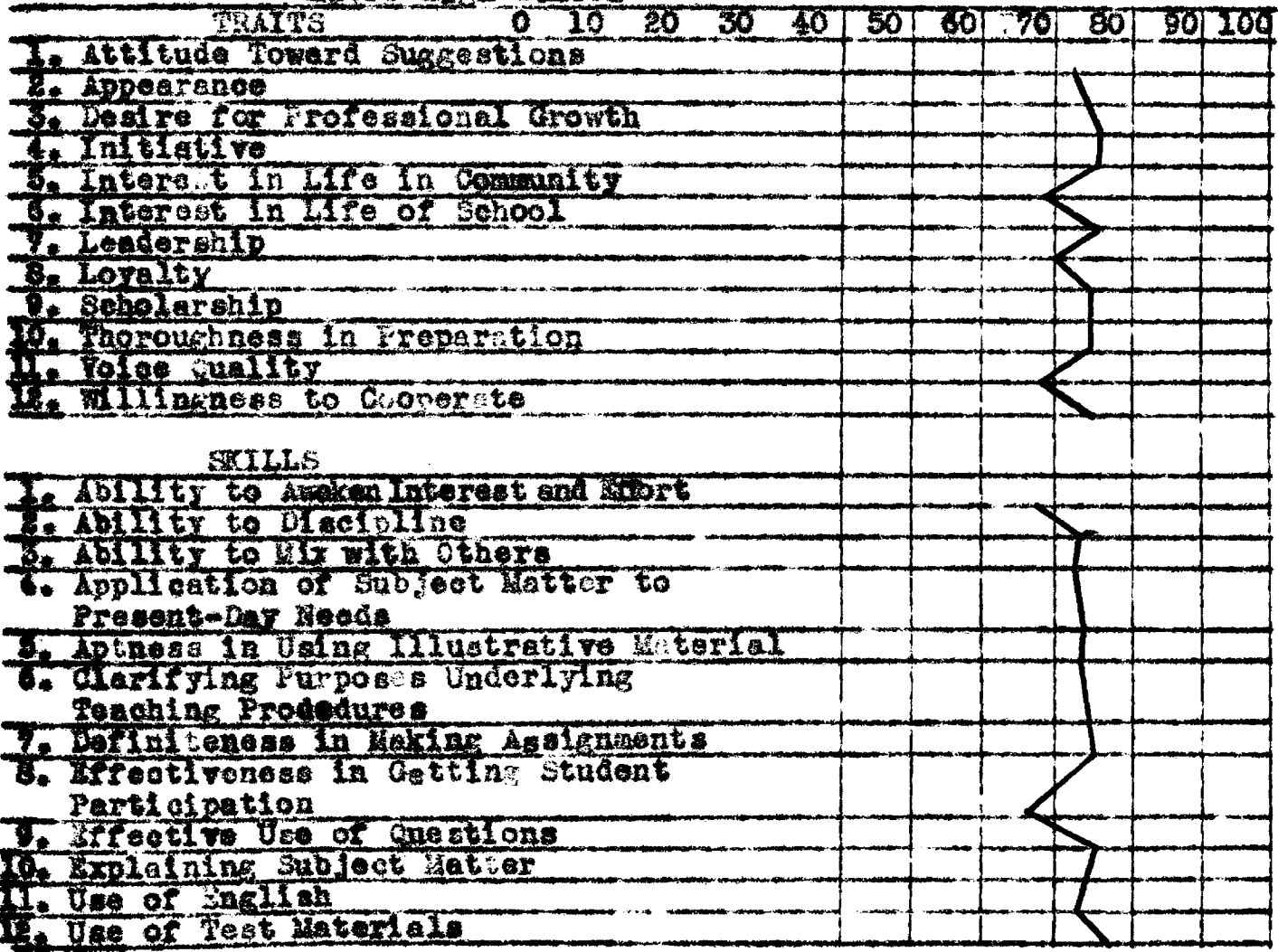
#### Teacher Rating

Many educators believe that a frank and impartial analysis of the traits and skills possessed by a teacher is helpful in the improvement of instruction. Such an analysis will show both points of strength and points of weakness. A knowledge of these points

should help to establish the strong ones more firmly and lay the foundation work for the elimination of these weaknesses which affect teaching success.

To check these skills and traits, a Morrison Rating Scale was used. The teacher and classes were asked to do the rating, and the average of these two ratings were recorded on a graph. Many of the teachers had their entire class membership rate them, and these ratings were averaged with the teacher's own ratings and the averages plotted on a graph, as shown in Graph 10.

GRAPH 10. Summary Profile for High School Teachers of Havre High School



There were two parts to the rating sheet - one dealing with personal traits; the other, with teaching skills. The average result was almost a straight line between the 80-and 85-point

boundaries on the scale. There were only two traits and two skills wherein the teachers dropped below the 80 per cent rating. The skills rated below were the ability to awaken interest and the effort on the part of the members of a class, and the effectiveness in getting pupil participation. The two traits marked the lowest were interest in the life of the community and voice quality. Such a rating list has little or no value unless rated by an expert in supervision. The teachers are likely to rate themselves too low, and this fact is generally counteracted by the students marking too high.

#### Pupil-Teacher Ratio Growth of Staff

1917-1937

Records for the number of students enrolled are only available since 1917-18, as all earlier records were destroyed when the high school burned in 1917. During this period of twenty years, the staff has grown from eight members to twenty-three full-time teachers. The high school enrollment has increased from 157 to 630, or about 400 per cent. The pupil-teacher ratio, based upon the number of pupils taught each day by a teacher, has increased from 16 to 22. The peak year was 1933-34, during the depression, when the ratio was 31.8 to 1. It has been estimated that the present staff can absorb about 100 additional pupils without any undue burden being placed upon the plant or individual teachers.

#### Summary

The high school staff, when considered from the various phases discussed in this chapter, ranks well above the standards of the country as a whole in experience, training, professional growth, personality, ratio of men to women, and median age. It is

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TABLE 37. Teacher-Pupil Ratio, Growth of Staff, and Enrollment 1917-1937.

School Year	Enrollment*	Full-time teachers	Pupil-Teacher Ratio*
1917-18		8	16
1918-19	157	9	16
1919-20	167	10	16
1920-21	238	10	22
1921-22	241	9	31
1922-23	295	12	21 plus
1923-24	341	13	22 "
1924-25	378	11	23 "
1925-26	264	13	23.4
1926-27	271	15	24.3
1927-28		14	23.7
1928-29	450	17	25.7
1929-30	499	18	23.6
1930-31	496	19	24.9
1931-32	523	19	24.73
1932-33	530	19	29
1933-34	546	17	31.8
1934-35	565	21	27.5
1935-36	605	21	28
1936-37	630	23	28

\* Teacher-Pupil ratio based upon number of pupils in a teacher's class.

\* Enrollment is original enrollment.

recommended that the community continue its selection of teachers on a basis of ability to serve the children of the community. However, more supervision is needed, and this can be obtained by releasing the principal from his many clerical duties. The school is badly in need of a new salary schedule to maintain the standard of living of its staff. If the proposed schedule is adopted, that will do much to attract and retain capable teachers in the local system. When considered by the many criteria upon which the quality of a good teacher is based, the professional personnel of the Havre High School, as it should be, is one of its outstanding assets.

## CHAPTER VII

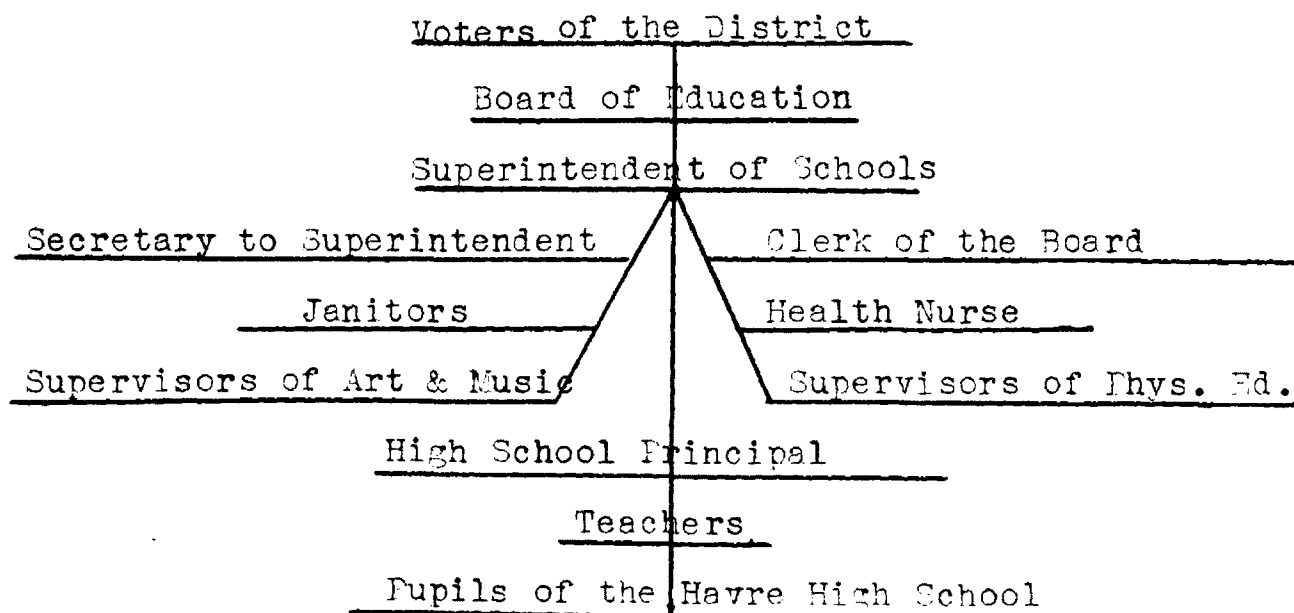
### Administration Practices and Financing

The control of the public school system and the Havre High School is vested in a board of education which is composed of five members who are elected by the voters of the district. The Board of education is responsible for the development of the public school system of which the high school is a part. The terms of office of the members of the board are so arranged that no more than two are up for election in any one given year.

A representation of the control and organization of the school is presented in Graph XI. The voters elect a board who in turn select a superintendent who in conjunction with the board selects a principal. The teachers, stenographer, nurse, and janitors are selected upon the recommendation of the superintendent.

The board of education selects a clerk who is a full time employee under the jurisdiction of the superintendent and has his offices located in the principal's office in the high school.

Graph XI. Administration and Supervisory Organization of the High School



The board of education meets once a month for its regular meeting. There are also many special meetings held during the year. The meetings are all held in the principal's office in the high school. This office is connected with that of the superintendent's. A majority of the board constitutes a quorum and a majority of the quorum voting together decides a question. The meetings are open to the public but very few of the patrons avail themselves of this privilege and usually attend only upon a special invitation of the board or superintendent.

A careful check of the minutes revealed that the chairman of the board appoints a special committee for special jobs but as a rule the entire board acts as a unit. This method saves time and does not interfere with the executive duties which can be best handled by the superintendent who is hired as an educational expert. The board is then left free to deal with the larger and more fundamental issues which have to do with the policies and management of the school. This policy of allowing the superintendent to handle all executive affairs, is<sup>a</sup> comparatively recent innovation in Havre. In the former years, individual members of the board purchased the supplies, and directed janitorial and financial affairs. Since the superintendent is an expert on educational matters, it is a wise board which allows him to direct the school with a minimum amount of supervision. The board at all times has given generously of its time to the work of the school.

The superintendent of schools is recognized as the chief executive officer of the board of education. The superintendent



is the proper person to assemble information for his own guidance and for the purpose of presenting recommendations to the board for their passing upon them. It is the function of the board to consider the recommendations and reports of the superintendent of schools. The board can either accept them, reject them, or ask him for further information if it is desired, before acting upon them. The continuance of this policy of delegating those duties of a professional nature to the superintendent and his staff will greatly increase the efficiency of the high school. Such a policy tends towards unity in administration which is one of the factors contributing to the success of a real school program.

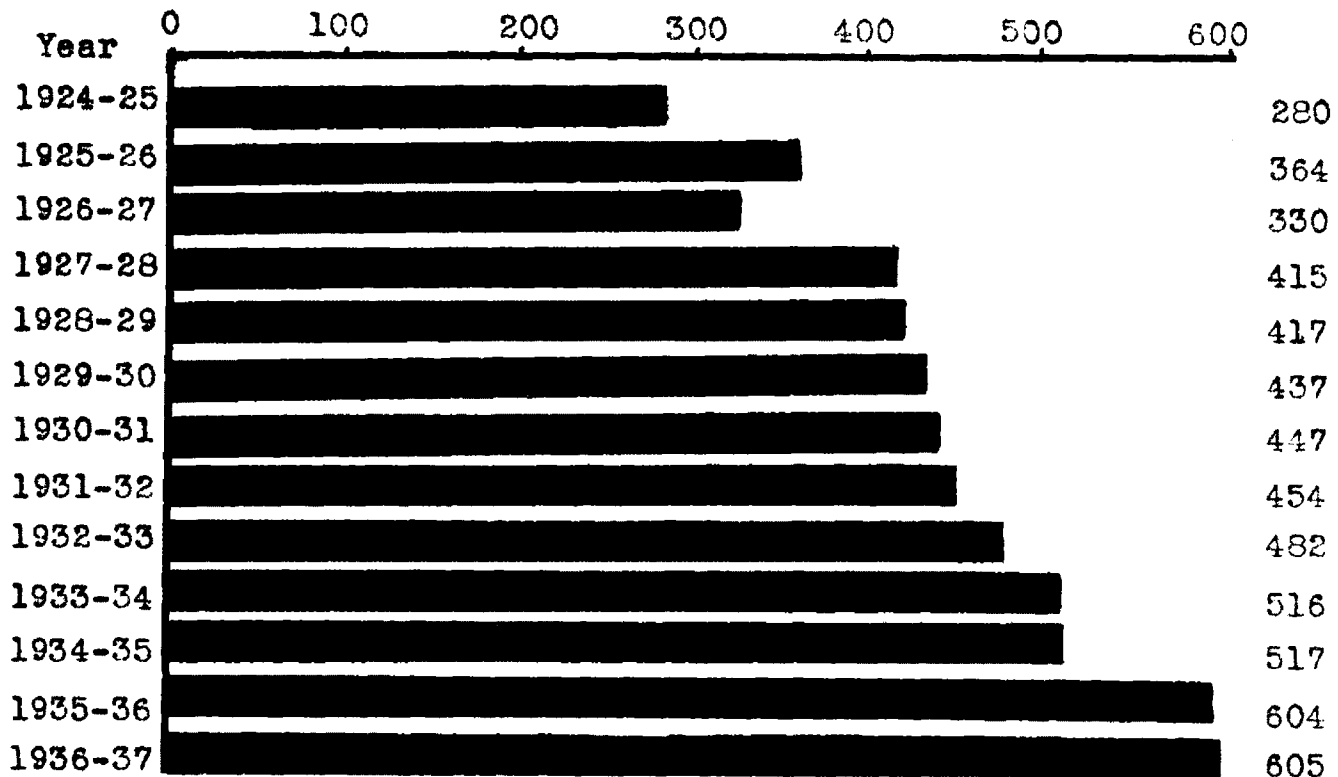
#### Census and Attendance

The attendance record work of the high school is in charge of the principal and the stenographer. The census of the district is taken each year by the clerk of the board. He receives no special remuneration for this work as he is employed on a yearly basis. The chief value of a school census is to help in anticipating need for future building and desirable sites for such buildings. A census of eighth grade graduates enables the principal and superintendent to anticipate a need for adding classes and teachers to the high school to care for an increase in the ninth grade. Attendance records are kept by the advisory room teachers and these records are checked against those of the principal at the end of the term prior to the making out of the final records.

There is evidence of much truancy which could be cut down by the passing and enforcing of a strict set of rules in regard to this matter. Any student who has been absent for three consecutive days must obtain a permit from the public health nurse before

presenting an excuse to the principal for his signature. This<sup>-133-</sup> procedure is deemed advisable to prevent the return of any student who is recovering from some contagious disease. Graph 12 shows the daily attendance for school years from 1924 to 1937.

GRAPH 12. Average Daily Attendance of the Havre High School Students.



### Financial Accounting

All accounts of the high school are handled by the clerk of the board who also handles the accounts of the other schools in the district. These accounts are all kept according to the best business practices with a yearly audit serving as a check upon all accounts. The school accounts are divided between the two banks in the city. Accounting for all receipts rests with the clerk under the direction of the board.

During the school year about \$14,000 are handled in accounts for the various organizations functioning in the high school. Perhaps the largest accounts are those of the athletic association which yearly handles over \$4,000. All moneys are deposited with the clerk of the board who acts in the capacity of a central treasurer for all the extra-curricular and curricular activities. A receipt is issued to the organization treasurer and then all money is deposited in a common account to facilitate banking. All accounts, with the exception of the athletic association's, must balance by the end of the year. Activity sponsors are responsible for seeing that the obligations of their respective organizations are paid and that all dues, fees, and fines are collected, and deposited with the central treasurer.

The superintendent of schools is under a bond to the amount of funds handled.

Centralization of financial control is desirable but does not mean that a centralization of management is either practical or desirable. All responsibility is left to the organization officers and sponsors, but checks and balances should be used to safeguard the funds as well as the reputations of those handling these funds. All profits and accumulated funds accrue to general fund for extra-curricular activities, with the exception of the funds of the classes which they retain and use the following year. This general fund should be left to the student council for apportionment under the supervision of the principal. Such a practice is not followed in Havre, and it is recommended that a better system of checks and balances be

provided as well as the creation of a general fund which could be used for the benefit of the school and the student body as a whole. The extra-curricular activities have grown to such proportions that special attention should be given to the accounting of their funds by the administration.

Table 41 shows the amounts and classification of the internal accounts for the school year of 1936-37 for the Havre High School. Funds are raised for athletics and other school activities by the sale of season tickets for three dollars each. This price, which at first seems high, is in reality only about one third of the cost of single admissions to the various events. These tickets entitle a student to admission to all athletic contests, a dramatic presentation, band concerts, school assemblies and subscription to the school paper. It is recommended that the price be lowered to \$2.50 or \$2.00 and that an intensive educational campaign be launched to make the purchase of such a ticket mandatory. Under such a plan, about the same amount of revenue would be realized and yet this would not exclude anyone from enjoying and benefiting from this entertainments. Certainly if an activity is worth sponsoring it should have the financial and moral support of the entire student body.

Many benefits are derived from such activities and the students who do not attend miss an important part of their educational opportunity. Especially is this true today when so much is being done to train one for leisure time activities. Another important feature of such a compulsory ticket would be the assurance of good attendance at all activities; this would be good for the moral of the school and develop a wholesome,

cooperative civic spirit. Not the least important is the fact that this method would assure a definite income which would facilitate budget making for extra-curricular activities.

TABLE 41. Itemized Statement Of All Internal Accounts of the Havre High School, 1936-37 Based Upon Audits Made on These Dates.

Name of Account	December, 1936			May 1, 1937		
	Receipts	Exp.	Balance	Receipts	Exp.	Balance
Activity Tickets	\$805.70	\$626.65	\$179.05	\$884.05	\$884.05	\$ 00.00
American Observer	----	----	----	17.50	17.50	00.00
Assemblies	37.06	30.00	8.06	60.31	60.00	.31
Athletic Association	2496.85	2316.81	180.04	4594.60	3922.37	672.23
Art Exhibit	175.95	175.95	00.00	175.95	175.95	00.00
Band & Orchestra	33.65	21.94	11.71	55.40	42.94	12.46
Book Fund	1363.40	63.25	1300.15	1393.40	129.25	1264.15
Bookkeeping Sets	30.00	00.00	30.00	30.00	25.92	4.08
City Athletic League	76.50	25.00	51.50	105.00	124.00	-19.00
Classes: Seniors	53.02	00.00	53.02	1242.53	632.17	610.36
Juniors	----	----	----	131.25	33.89	97.36
Sophomore	----	----	----	6.60	.60	6.00
Freshman	----	----	----	2.00	2.00	00.00
Chemistry	226.75	103.78	122.97	227.75	129.04	98.71
General Fund	14.05	00.00	1.90	28.18	34.39	-6.21
Gregg Writers	25.10	25.10	00.00	25.10	25.10	00.00
Gymnasium Baskets	----	----	----	24.30	144.00	-119.70
Home Economics	95.62	49.65	45.97	108.53	110.42	-2.09
Locker Fund	458.00	83.11	374.89	464.50	94.61	369.89
Mont. Edu. Assoc.	106.47	106.47	00.00	106.47	106.47	00.00
Mont. Officials Assoc.	.50	9.67	-9.17	.50	9.67	-9.17
N.W. Assemblies	48.60	45.00	3.60	87.00	90.00	-3.00
Opportunity	----	----	----	10.82	55.46	-44.64
Opportunity & Drama Clubs	43.90	00.00	43.90	72.53	117.16	-46.66
Red Cross Flood Relief	----	----	----	79.10	79.10	00.00
Saxette	----	----	----	60.00	56.00	4.00
Shop	172.62	17.47	155.15	173.62	149.35	24.27
Shop Club	7.66	.75	6.91	7.66	7.66	00.00
Spur	45.81	28.25	17.56	62.81	49.31	13.50
Stampede	175.59	123.50	52.09	427.16	355.50	71.66
Student Council	.35	----	.35	33.45	18.24	15.21
Work Books	274.85	164.34	110.51	329.60	268.95	60.65
Totals:	\$8769.00	\$4019.76	\$2800.51	\$11074.42	\$9179.17	\$3323.03

### Insurance

Fire, wind, burglar, and explosion insurance is carried by the board on all buildings in the district. By changing the policy plan for all insurance from a high cost two and three year plan to a five year co-insurance, a considerable saving was made to the

district. Under this plan all policies expire in December, <sup>-137-</sup> and with equal premium payments for each of the five years. This feature makes it easier to plan the budget as the amount due for insurance is always the same and under this plan the insurance is considerably cheaper. All fire insurance carries the 90% co-insurance clause. Since 1929 the insurance rate has been reduced from nineteen cents to fifteen cents on the one year plan and from .95 to .75 on the five year plan. The total amount of insurance for the district is \$322,560 of which amount premiums in the sum of \$282 a year are paid for insurance upon the high school buildings. The entire amount of insurance carried by the district is divided among thirteen agencies.

#### Transportation

To date no provision has been made to provide transportation to the high school pupils. The location of the present site of the high school is easily within a mile and a half of the homes of all city residents. Some children who live from three to five miles from the school are provided with transportation by their parents. Those pupils who reside in the district and who live further than three miles provide their own transportation or move to town for the school term. However, due to the new state law some provision will have to be made to provide for transportation money. This is to be done by the district's budgeting for the amount of transportation money needed. The state will refund half of this amount the next fall, and this fact will throw an additional burden upon the high school budget, especially the first year, as the initial amount of the transportation will have to be paid by the district first and which will later be reimbursed by the state

### Maintenance of the Plant

A yearly equipment appraisal is made in connection with the insurance requirements but in general no sound method of figuring depreciation is in use. There is not a complete set of plans and blue prints of the high school buildings and grounds. These should be readily available and kept on file in the vault.

The maintenance of the high school is directly under supervision of the superintendant who delegates some of the supervisory responsibilities to the principal and the clerk. The maintenance of equipment is looked after by a very efficient custodian. The janitorial staff of the high school consists of three full time male janitors and two men who are under the W. P. A. relief setup. Two of the full time janitors are licensed stationary engineers. The head janitor is in charge of the janitorial supplies and each man has a certain part of the building to maintain.

The amount of maintenance and repair work that is done by the janitors varies a great deal, but in general each looks after a certain part of the plant, making the necessary repairs in connection with his regular duties. During the past two years much repair work has been done under the W. P. A. with the materials being furnished by the board of education. Repairs to the gymnasium, basement, the addition of a sheltered passageway from the gym to the main building, and the improvement of the athletic field, were all accomplished during the summer and school year of 1936-37. However, this type of work is often too slow for emergency repairs. The repairs which are not urgent are usually done during the summer months. The general condition of the buildings is good and

the janitorial staff and the administration can be proud of the appearance and usefulness of the plant and its equipment.

In addition to the general good all around efficiency of the plant the janitors have maintained a large lawn which contains many trees and shrubs. It is indeed a pleasing sight to see such a well groomed lawn during the fall and spring as well as during the hot dry summers. Such an atmosphere does much to maintain the morale of the staff and the student body.

The janitorial staff has a special shop wherein most of the minor repairs can be made. Repair needs are reported directly to the janitors who are in charge of that part of the building in which the repairs are needed.

#### High School Reports

All records concerning the pupil data are kept in filing cabinets in the principal's office. A card index system is used, with the current student records filed in one cabinet, and the records of the former students in another. The records of the former students date back only as far as 1917 when most of the old records were destroyed in the fire which ruined the school. The individual data cards are all filed alphabetically irrespective of classes. Upon each card may be found the following information; age, date and place of birth, date of entering high school, church membership, address, occupation of parents, nationality of parents, class, vocational and educational aims, and the student's attendance record. The permanent record cards are kept in another file and upon these appear the following; date of initial enrollment, list of credits and marks earned each semester, the I. Q. score, achievement test results, and the record of the students failure.



The health records are kept both by the physical education-140- directors and the health nurse.

Each teacher hands to the principal a list of all failures, at the end of each six weeks period and at the end of each semester. These failure lists are kept on file until the student graduates as they serve as a means of checking the reasons for such failures.

### Reports to the Parents

A report of each students work is sent home at the end of each six weeks period for the parents' inspection and signature. The marks are issued in the conventional six letter system ranging from "A" to "F". The letter "E" is assigned for a condition in a subject. In addition to the subject marks, a space is provided for the attendance record of the student. The conduct of each pupil is indicated by a subscript numeral below the subject mark. This mark is known as a citizenship mark. The numeral 1, indicates excellent conduct, 2, average, 3, unsatisfactory, and 4, means discourteous, disinterested and a nuisance in class. The total number of credits which a student has earned to date are also listed along with the required amount needed for graduation in a given course.

In addition to the above data each report card contains an explanation concerning grade points. An "A" is assigned a value of three points, a "B" two, and a "C" one grade point. A two point average is necessary to make the honor roll and no mark in citizenship shall be below two. On the back of the card is a list of the necessary subjects required for graduation from each course.

Below the space provided for the parent's signature is a brief explanation pertaining to the signing of the card. This note reads as follows: "Please sign this, (your signature merely indicates that you have carefully examined it) and return to the school as soon as possible." This note was added because on several occasions the parents refused to sign saying that they did not approve of the marks and thought that their signature gave approval to them. The absences and tardiness are recorded by the advisory teacher and each teacher records his own subject marks.

### The Budget

The school budget is the instrument through which educational aims are achieved and because of this fact should be carefully planned. Since the high school budget law was passed, the high school budget has been entirely separate from the budget of the elementary schools in the district.

The total expenses for running the high school in Havre have increased slightly with the increase in enrollment, but the income has been appreciably reduced on account of lower valuation of property within the district and county. The only source of income is the county wide nine mill levy which is divided among the seven high schools of the county. The amount a school can budget depends upon the number of students enrolled, this amount ranges from \$110 for Havre to \$170 per pupil for the smaller schools.

Table 42 shows the incomes and expenditures for the Havre High School during the school year of 1935-36. No warrants were registered during this year. However, this became necessary in 1936-37 due to a drastic cut in the budget by county commissioners.

**TABLE 42. INCOMES AND EXPENDITURES FOR HAVRE HIGH SCHOOL 1935-36.--142-**

**Receipts:**

County apportionment.....	\$39,138.20	
County apportionment.....	13,212.21	
State Oil Tax.....	419.17	
Tuition.....	125.12	
Total receipts 1935-36.....		\$52,894.70
Cash On Hand June 30, 1935.....		15,427.19
<b>TOTAL:</b>		<b>\$68,321.89</b>

**Expenditures:**

Warrants.....	\$49,614.49	
Tuition.....	129.44	\$49,743.93
Balance in treasury June 30, 1936		18,577.96
Warrants Outstanding		8,881.23
Balance on Hand.....		<b>\$ 9,696.73</b>

**TABLE 43. HIGH SCHOOL BUDGET, 1936-37**

	Budget 1936-37	Expenses to December 30	Balance Budget
<b>General Control:</b>			
School board and Sd.	\$500.00	\$ 500.00	---
Supplies and other expenses	100.00	6.83	93.37
Salaries for H. S. Admin.	1800.00	1650.00	150.00
Supplies for H. S. Admin.	300.00	114.93	185.07
Other expenses for H. S. admin.	200.00	137.96	62.04
<b>Instructional Costs:</b>			
Salaries of teachers	39150.00	16452.85	22697.15
Text books	1000.00	811.67	188.33
Supplies for instruction	1000.00	615.35	384.65
<b>Maintenance of Plant:</b>			
Repairs & upkeep of Bldgs. and grounds	740.61	312.61	428.00
Replacement & upkeep of equipment	1000.00	401.97	598.21
<b>Operation of Plant:</b>			
Salaries of janitors	4000.00	2294.00	1706.00
Supplies for janitors	1000.00	754.08	245.92
Fuel (gas)	2000.00	635.38	1364.62
Light and Power	1500.00	566.28	933.72
Water	500.00	147.15	352.85
Other operating expenses	100.00	12.28	87.72
<b>Auxiliary Agencies:</b>			
Library	1000.00	656.27	343.73
Health	1200.00	783.20	416.20
<b>Fixed Charges:</b>			
Rent, Interest, Pensions	1500.00	1322.67	177.33
<b>Capital Outlay:</b>			
New grounds, bldgs., alterations	200.00	92.24	107.76
New-equipment	2500.00	00.00	2500.00
<b>TOTALS:</b>	<b>\$61290.61</b>	<b>\$28267.34</b>	<b>\$33023.27</b>

TABLE 44. Hill County High School Budgets, showing the High School Budgets of the Hill County Schools.

School	Enrollment	Maximum Per Capita by Law	Maximum Budgets Fixed by Law.
Box Elder	51	\$170.00	\$8,670.00
Havre	603	110.00	66,330.00
Kremlin	17	170.00	2,890.00
Gilford	40	170.00	6,800.00
Hingham	55	170.00	9,350.00
Radyard	65	168.00	10,968.75
Inverness	35	170.00	5,958.75
TOTALS:	866		\$110,967.50

The total valuation of Hill County is \$7,600,000.00 which makes a maximum budget of \$68,400 under the nine mill levy allowance. This amounts to \$78.98 for each student in the county. With a decrease in valuation for 1937 it appears that an increase in the levy will have to be made in order to reach the budget requirements.

The total amount received by the Havre High School from the levy, for 1936-37, was \$40,880.88. Similar figures can be obtained for the other schools by dividing the total maximum budgets by the individual school's maximum budget and then multiplying the answer by the maximum budget fixed by law. It will be noticed that the final Havre budget was \$61,290.21. The high school budget for 1936-37 was cut approximately \$12,000 by the county commissioners. This condition made it necessary to register warrants. If conditions continue as they have, it may become necessary to make a special district levy to support the high school adequately.

Comparison of twelve counties

A comparison was made with eleven counties of comparable size to Hill County as to levy, taxable valuation, enrollment, per capita wealth, millage and tax receipts per capita. It was found that Hill County ranks eighth in levy; seventh in taxable valuation; seventh in tax wealth per capita; eighth in enrollment and tenth in tax receipts per capita. Table-45 shows the data on the above items for twelve counties.

TABLE 45. Comparisons of High School Tax Levies in Twelve Counties, Per Capita--Per Pupil.

County	Millage	Valuation	Enrollment	Wealth per capita	Tax receipts per capita
Lewis & Clark	8.6	\$14,395,867	925	\$15,563.09	\$133.84
Deer Lodge	7.0	5,236,860	317	16,516.90	116.62
Custer	13.0	6,717,533	810	8,300.00	107.90
Cascade	9.0	28,005,663	2505	11,179.00	100.61
Fergus	9.0	10,496,744	1034	10,152.00	91.36
Flathead	14.371	9,272,451	1575	6,176.00	90.00
Blaine	8.7	4,821,682	471	10,337.00	89.06
<u>Hill</u>	9.0	7,642,774	866	8,825.27	79.42
Missoula	9.25	12,191,670	1403	8,689.71	83.80
Valley	12.0	6,614,427	2989	6,688.00	80.25
Yellowstone	10.5	18,341,427	2461	7,448.77	78.21
Park	8.5	6,687.428	660	10,133.00	65.86
Havre's rank	8	7	8	7	10

A complete account of the bonded indebtedness of the Havre school district #16 will be found in the Master's Thesis of W. J. Shirley, "A Survey of the Elementary Schools of Havre" 1936.

It is my purpose to give only a brief account of the bonds which pertain to the high school of Havre. Table 46 gives the complete data on the bonds dealing with the high school from the erection of its first building to the present time.

TABLE 46. Bonds for Havre High School.

Purpose	Amount	Rate	Issued	Due	Retired	Interest pd.
H. S. Building	\$15,000	4.6%	1908	1928	1926	\$10,350
H. S. Building	13,000	5.0	1914	1934	1933	12,350
H. S. Building & furnishings	8,000	5.0	1917	1937	1931	5,600
H. S. Building & furnishings	23,000	5.5	1917	1937	1929	14,547
Building & re- modeling H. S. (\$36,000 unpaid)	60,000	4.5	1928	1948		18,630
	<u>\$125,000</u>					<u>\$61,477</u>

Improvements on the High School, 1936-37

The following table gives a complete account of all improvements made upon the high school during the current school year and during the last vacation season. Much help was received from the W. P. A. which furnished the labor, except for some of the more technical work. About \$200 was spent for labor to supplement that furnished by the W.P.A.

TABLE 47. Costs of Improvement and New Equipment for the High School, 1936-37.

Improvement and equipment	Cost
Rebuilding Gymnasium Locker Rooms:	
General contract for improvements	\$4,342.82
Electric wiring	387.50
Plumbing	872.30
Public Address System	1,685.00
Stove for Home Economics Room	125.00
Automatic hot water system for the gym.	710.00
Lockers for main hall, library desks and chairs	
classroom chairs, teachers desks and chairs	1,909.70
Lockers for girls locker room	350.00
Gym baskets for boys physical education	144.00
Bleachers built in the gymnasium	800.00
Shed passageway from gym to main building	100.00
Athletic field	300.00
<b>TOTAL:</b>	<b>\$11,726.33</b>

#### Pupil Teacher Costs Per Subject

The amount expended for teaching services per student for each subject is a fair indication of the emphasis placed upon that subject and the equity of the salary distribution. Naturally one expects to pay more salary to the members of the faculty who are specialists, and the size of the class will have a direct relationship upon the per pupil cost. Table 48 shows the amount expended for each subject based upon the teachers' salaries alone. It will be noted that the lowest per student cost is in physical education. This is due to the fact that nearly all the boys and girls of the high school take physical education and that all this work is handled by two instructors. Mathematics, on the other hand, is the highest of the academic subjects as the cost of instruction is divided among only 253 students, which is the smallest enrollment in any of the solid subjects.

TABLE 48. Per Pupil Teaching Expenditures Per Subject for the Havre High School 1936-37.

Subjects	Number of Pupils	Number of Teachers	Salaries Per subject	Per-Pupil Cost
Commercial	363	3	\$4,500	\$12.39
English	593	4	7,400	12.51
Foreign Language	268	3	2,900	10.82
Industrial Arts	186	3	3,840	21.19
Mathematics	253	3	3,790	14.98
Music	225	2	2,475	10.54
Natural Sciences	259	3	3,220	12.47
Physical Education	544	2	2,950	5.42
Social Sciences	469	3	4,700	10.02

The reason for lower instructional costs in the various subjects for which there are the same number of teachers employed is due to the fact that there were six new additions to the faculty all of whom started at the minimum salary. The science department had two new teachers, English one, commercial department one, social science one, and physical education one. The salaries paid are based upon tenure in the local system and not upon special qualifications. The average per pupil cost for instruction is \$12.26 for all subjects. This figure does not mean that the instruction is inferior in any way but does emphasize the fact that a more equitable salary schedule should be adopted.

#### Some Needed Administrative Facilities

In order to keep the student data of the high school up to date more filing cabinets will have to be provided for the principals office. A card index should be kept of each student's disciplinary record. In this manner, an accurate check would be had



at all times of a student's conduct and this would enable the principal to quickly determine if the particular student was a habitual trouble maker. A better check should be made of a student's educational and vocational aims and in this way facilitate advising what courses should be studied so that a minimum of time will be wasted. Another file containing the personal data of each student as to environment, social background and special handicaps should be installed. This would enable each teacher to refer to the files and so possibly lead to a better understanding between the pupil and teacher and hence help to reduce the number of failures that result from bad environmental conditions and handicaps.

A more adequate source of revenue should be worked for if the high school is to continue to operate upon an efficient basis.

There is an urgent need for more room for administration and class room purposes. There is plenty of available space in the west wing of the building to care for all immediate needs, and it remains only for the board to decide to use the building for the purpose for which it was built, that of housing the administrative offices and the student body. At present this portion of the building is being used for the housing of the Northern Montana College. This arrangement worked as long as there was need for this part of the building by the high school, but now that the enrollment has reached the point at which the old part of the building can no longer accommodate the high school classes, a change will have to be made.

There is an urgent need for the installation of a large fire-proof safe or vault for the purpose of keeping all high school records. This is especially desirable in view of past experiences and especially

since the building is not constructed of fireproof material.

### High School Fully Accredited

After inspection of the building by the state high school examiner the high school was fully accredited by the Northwest Association of Secondary Schools and by the North Central Association of Secondary Schools and Colleges, the state inspector commented very favorably upon the growth of the library and the employment of a full time librarian. He also expressed pleasure with the installation of a complete program of health and physical education, with the employment of a full time public health nurse. He expressed his opinion that Havre was among the leaders of the state in the matter of health and physical education. Havre is the only school in the state to pay any attention to the health of its teachers. Special praise was given to Superintendent Shirley for his progressive education philosophy which prompted him to install a public address system in the high school and for the introduction of an efficient audio-vision education program.

### The High School Library

A well equipped library is another important and necessary part of the modern high school curriculum. The prime function of a library is to offer broadening, exploratory opportunities as a basis of cultural advancement; and, later, specialization for students and teachers alike.<sup>49</sup> It also furnishes a means to care for those individual differences and abilities found among the pupils of the various classes. Supplementary readings may be assigned and individual research carried on.

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49. Eargo, Lucile F. The Library in the School, American Library Association, Chicago, 1933.

The library is growing rapidly, and at the beginning of the 1936-37 school year a full time librarian was employed. Since fall, all books have been catalogued according to the Dewey Decimal System and grouped according to subject content. The library has grown during the current year from 2572 to 3138 volumes. The Board of Education has been quite generous in supplying the necessary funds for the efficient equipment and maintenance of an up-to-date library. The library is perhaps the most used room in the building, having its seating capacity of sixty filled practically every period of the day, as well as before and after school.

#### Improvements in the Library

Last year the high school library was housed in a room which would accommodate, at the most, eighteen students. This year the seating capacity of the library is sixty. The new room has adequate natural light on bright days which can be supplemented on dark days by excellent, new lights of the indirect type. The walls are light in color, producing a very cheerful effect. Chairs and tables are dark oak with steel bases. This type of furniture has proved very satisfactory in school libraries because of its durability. In the smaller reading room, the shelving is all new and made according to the best specifications on library equipment.

Besides the two reading rooms, there is a small stack room and another small room which the librarian uses for her office. One window in the large reading room is filled with plants which are artistically arranged, and should add greatly to the appearance

of the room. There are several good pictures and two illustrated literature maps on the wall. Of course, there are bulletin boards which the librarian uses to advertise her books and attract the interest of the students to various things that can be found in the library.

From the report on the number of books in the library and the number purchased this year, it can be seen that the book collection has had a great increase this year. With all the new improvements in the library and the employment of a full-time librarian, it surely can be said that the Havre High school has made advancement in providing adequate reading facilities for its students.

#### Some Weak Points in the Library Organization

There are several things that should be purchased in order to continue the good work started this year in connection with the library. A vertical filing cabinet is needed to take care of the pictures and clippings which play such an important part in the collection of material for various uses in the school program.

Most libraries have a covering on the floor which is sound-proof. This helps to maintain a good atmosphere for study. As it is, almost every footfall is heard and noticed by students who are studying. 50

The indirect lighting system has been mentioned, and also the good natural light. There are plenty of windows in the library but there should be a lighter type of shade provided for these

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50. Fargo, Lucile F. The Library in the School, American Library Association, Chicago, p. 246

windows. Venetian blinds are ideal for this room.

### Selection of Books and Magazines

The teachers aid in the selection of books for use as references in their respective classes. In addition to the books listed in Table 10, pamphlets and stereoscopic slides are catalogued and filed for reference. The fiction section of the library is not as yet up to standard, but is rapidly being built up to what it should be for a school of the size of that in Havre. At present there is a total of only 241 fiction books, 115 of these having been purchased this year. At the beginning of the school year there were very few books of this type in the library. This made it very difficult for the students to obtain books from the school library which were on the approved book report list. The immediate aim of the librarian is to build up this section of the library so that more reading of this type of book can be done in the school.

### Non-Fiction Books

Table 10 shows the number of non-fiction books purchased this year and also the total number in each subject field, classified according to the Dewey Decimal System. As can be seen by consulting the chart, each subject field has a range of 100 points in this classification.

The non-fiction books are classified according to the Dewey Decimal classification system. This is the way in which they are listed here.

Table 10 Classification of Non-Fiction Books in High School Library

NUMBER	CLASSIFICATION	NEW BOOKS	TOTAL
000-099	General Works--Encyclopedias	39	178
100-199	Philos.--psych., ethics, etc.	17	30
200-299	Religion	2	20
300-399	Soc.--gov., laws, educ.-etc.	86	385
400-499	Lang.--Readers, grammars, dict.	3	65
500-599	Science--Math., astron. bot. etc.	24	300
600-699	Useful Arts--medicine, home ec.	91	316
700-799	Fine Arts--Paint, Mus. Needle	11	62
800-899	Lit.--poems, dramas, essays	36	290
900-999	Hist.--travel, biography	44	388
	Short Story Collection	3	56
		441	2331

### MAGAZINES

American Boy	Musician
American Girl	National Geographic
American Home	Nature Magazine
American Magazine	Occupations
American Observer	Open Road for Boys
Arts and Decoration	Parents
Athletic Journal	Pathfinder
Atlantic Monthly	Practical Home Economics
Better Homes and Gardens	Popular Mechanics
Boy's Life	Popular Science
The Booklist	Reader's Digest
Cosmopolitan	Review of Reviews
Country Gentleman	Saturday Evening Post
Current History	Science News Letter
Fiction Parade	Scribner's
Forum	School Arts
Good Housekeeping	School Musician
Harper's	St. Nicholas
Journal of Home Economics	Scholastic Coach
Life	Scholastic
Literary Digest	Time
McCall's	The Wilson Bulletin

### NEWSPAPERS

Christian Science Monitor	Minneapolis Journal
Great Falls Tribune	New York Times ( Sunday)
Havre Daily News	The United States News
Montana Record Herald	

The High School Plant

The High School building provided for the Havre students is about equal to the average school of its age. The building now occupied was rebuilt after the fire of 1917. In 1925 an auditorium was added in the form of a wing making the building T-shaped. In 1928 another wing was added to the main building giving it an L shape. This new portion was designed for immediate use by the Junior High and then with the establishment of Northern Montana College this portion of the building was occupied by the college. In 1927, a gymnasium was built but not completed, and, with the addition of the industrial arts wing, the building is almost a square with the exception of a driveway between the rear of the auditorium and the industrial arts wing. A high "Cyclone" Steel fence closes both ends of the driveway. The gates of this driveway are kept locked after school hours. The entire building with the exception of the gymnasium gives the general impression of being a pieced together affair with no sound plan being followed.

A new high school should be built either according to type A or type B classification of the American Institute of Architects.<sup>54</sup> The present building comes under the classification of type C.

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54. Type A--A Building constructed entirely of fire-resistive material, including its roof, windows, doors, floors and finish.  
 Type B--A Building of fire-resistive construction in its walls, floors, stairways and ceilings, but with wood finish, wood or composition floor surface, and wood roof construction over fireproof ceiling.  
 Type C--A Building with Masonry walls, fire-resistive corridors and stairways, but with ordinary construction otherwise, i.e., combustible floor, partitions, roofs and finish.  
 Type D--A building with masonry walls, but otherwise ordinary or joist construction and wood finish.  
 Type E--A frame building constructed with wood above foundation, with or without slate or other semi-fireproof material on roof.

The following table gives the scores of the Senior High School building<sup>55</sup> based on Englehart field survey book. Those scores are devised for the rating of a school building with a total of 1000 points being assigned to the building of the highest type. Buildings which are rated less than 500 points have so many defects that it is unwise to use them over any extended period.

The strongest points of the Havre High School according to the Score Card were the site and building. The weakest features were about equally divided among the other five items listed.

### School Site

Much credit is due to the committee, who in 1908, selected the present site of the Havre High School. It will be recalled at the time of selection this tract of land, 300 feet square, was just beyond the city limits. There were only a few homes within a block or two of the site and anyone living beyond was thought of as a farmer.

The city has gradually grown around the high school and it is estimated that in another ten or fifteen years it will be in about the exact center. Map I shows the plan of the city and the location of the various school buildings. It will be noted that at present a majority of the people live to the north and northeast of the high school. Those homes immediately to the west, east and south of the school are all comparatively new. There is a general trend toward expansion in these three directions with the school as a center. The extreme east side of Havre is not being built up and is occupied by the poorer class of people because of

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55 Englehart, N. L. Survey Field Book for the Analysis of a High School. Bureau of Publications, Teachers College, Columbia University, 1931.



TABLE 49. Scores of the Senior High School Building of Havre, May 1937.

Building Year of Construc- tion	Type of Building	Maximum Score and Allotted Scores by Sub Items General Adminis									
		Total	Build- ing	Service	Class	Special	Classrooms	Rooms	Service	tration	Rooms
Ideal Building	Type "A"	1000	100	155	270	145	140	140	80	50	50
Havre High School	Type "C"	653	87	125	199	89	55	80	18	18	18

cheaper rent and taxes.

The greatest distance anyone has to go to attend high school, and who live within the city limits, is twenty blocks or one and one quarter miles. A few families live to the north of the railroad tracks. In the fall of 1936 a viaduct was completed over the tracks which greatly increased the safety of those children going to and coming from school.

### The Population Trends of Havre

The United States Census Bureau has adopted a method of forecasting population based on past growth and expressed by the formula:

$$\frac{\text{Population of 1930} - \text{Population of 1920}}{12} \times 12 = \text{Annual Increase}$$

According to this method Havre would have a population of 7332 in 1940 whereas, it already has nearly 7500. Since the actual growth from 1920 to 1930 fell below the government estimate and the growth for the past six years is above this estimate it can be safe to reasonably predict a population of about 8000 in 1940. The present ratio of high school students to the entire population of Havre is about 1 to 12. Upon the basis of this ratio the enrollment should be about 666. Allowance for an undue increase would not bring the enrollment much over 700. This again may be justified by consulting the table of enrollments by grades and ages of all children from the first grade up. The average enrollment for each of the elementary grades is about 125 pupils. With the graduates from the parochial school, country schools and one and two year high schools in the county, the above estimate appears to be fairly conservative. In the light of these trends in popu-

lation growth there is no immediate need for an additional High School building. However, a plan should be devised to prepare for some building within the next ten to fifteen years.

In predicting the probable number of children that will be in the high school at a given future time, it is helpful to know what percentage of the school population was of the total population over a known period. In 1920 the percent of high school pupils of the population of Havre was 2.9%, in 1925, 4.7%, for the past ten year period, in the percentage of high school pupils to population. At this rate the enrollment will not exceed 700. It must be understood that at best this prediction is an approximation. There should be a periodic check on actual enrollment so that adjustments in the building program may be made.

#### The Present High School Building

The standard site for a high school building is set at about from twelve to twenty acres, and yet Havre High has only one square city block not counting the athletic field which is separate.<sup>5</sup>

At best now all that can be done to the present building is to remodel and rearrange the present available space. In the first place, the building is set far back from the street about 180 feet, which space is planted to lawn and shade trees. While this gives the school yard a good appearance from the front it does not allow for playground or other expansion. The athletic field is four blocks away and this makes it difficult to take physical education classes out for exercise and play in a 50 minute period. Too much time would be used in dressing and going to and from the field.

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56 The School Health Program, Committee on the School Child, Section III, White House Conference, p. 42.

The lighting facilities of the building along with the ventilation of the building are by far its worst features<sup>57</sup>. All rooms with the exception of two or three are inadequately lighted either by means of available sunlight or artificial lighting. Table 50 shows the number of foot candles of light in each room of the building as taken on a normal day with a few clouds but otherwise clear. All readings taken were recorded between 3 and 3:15 o'clock under normal school conditions.

For normal eye work such as reading there should be at least 10 foot candles of light available at all times. All readings were taken in the row of seats farthest from the windows. Many of the rooms fail to show an appreciable increase in illumination even when the electric lights were turned on. In some rooms it becomes necessary to burn the lights at least half of the day regardless

57. Ibid

TABLE 50. Showing Foot Candles of Illumination & Position of Each Room. "Readings taken on table and desk tops".

Room No.	Floor	Window Facing	Type of Work done	Foot Candles	Artificial Lighting Fixtures
Autidorium	3	East & West	Study Hall Assemblies	3.5	Semi-indirect Venetian Blinds
301	3	South	English	8½	Direct
302	3	North	Shorthand	11½	Direct
304	3	North & West	Typing	14	Direct
308	3	North & East	Bookkeeping	11	Direct
322	3	North	Soc. Sci.	11½	Direct
324	3	North	English	9½	Direct
309	3	South	Soc. Sci.	8½	Direct
Library reading room	3	South	Study	10	Indirect
Library main room	3	South	Study	10	Indirect
201	2	South	English	6	Direct
208	2	North	Math	7½	Direct
209	2	South	Foreign Lang.	5½	Direct
Prin.'s Office	2	North	Clerical	7	Indirect
Supt.'s Office	2	North	Clerical	10	Indirect
101	1	South	Foreign Lang.	1½	Direct
102	1	North	English	6	Direct
110	1	North	Math	6½	Direct
111	1	East & West into Hall	Science & Laboratory	0	Direct
112	1	East & West into Hall, South into 114	Hygiene	2	Direct
113	1	South & West	History	15	Direct

114	1	South & North	Biology	5½	-161- Direct
120	1	South	Mech. Draw	4½	Semi-indirect
121	1	South	English	3	Semi-indirect
122	1	South & next to gym	Sewing	0	Direct
Basement gym		South & West	Band	5	Direct
Basement gym		West & North	Home Ec.	25	Direct
Gym		All Sides	P. E.	12½	Direct
P.E. Office		South	Clerical	1	Indirect

of weather conditions and in rooms 111, 112, and 122 the lights are on almost continuously. Since the lighting fixtures are mainly direct type and of insufficient candle power it is very important that something be done immediately to prevent the strain upon the eyes of students and teachers who use these rooms. There is very little chance to improve the natural lighting in any of these rooms, therefore, artificial means will have to be resorted to.

It is strongly recommended that an entire new system of lighting be installed, preferably indirect similar to the type in the new junior High School and the Library. Certain rooms, especially the library and those facing the South should be provided with Venetian blinds so that intensity of light may be more easily regulated during the time of the day that these rooms receive direct sunlight.

The local light company has made a survey upon the lighting conditions and in the near future will outline to the Board of Education plans for the installation of a lighting system that will provide sufficient light at all times. This is a necessary

step in order to maintain this phase of student health.

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### Administrative Quarters

Undoubtedly, the greatest factor limiting the proper development of the administrative and supervisory programs, in the high school, has been the inadequate provision of office space for the superintendent of schools and his administrative staff. The superintendent, principal, clerk of the board, and the stenographer are all required to occupy an office space designed for the use of the principal alone. The superintendent has a small office about 9' x 12' with a small wash room adjoining. The stenographer, principal, and the clerk all work in an outer office about 25' x 15' which has a counter arrangement over which the business is transacted with the students. The superintendent should have an outer office and a reception room apart from that of the principal and the clerk. This would do away with the tendency of the students to go to the superintendent with their problems which really should be taken up with the principal. This would allow the superintendent more time to devote to the administrative duties required of him in directing the activities of the five rural, five elementary, and the Junior High schools. Such an arrangement would make for efficiency and privacy of the different administrative offices. In order to obtain such an arrangement the part of the building which was designed for use of the high school, but is now being used by the Northern Montana College, should be occupied by such offices and new classrooms.

A meeting room for the board of education, athletic council, parent teachers, and M. E. A. committees could then be provided. The school is also much in need of a fireproof vault to provide a

safe place to store old and current school records. Had such a vault been provided in the old school, the records would not have been destroyed when the building was burned to the ground in 1917.

### Ventilation System

The ventilation system does not exist as such and the only means of securing a supply of fresh air is by opening the window. This method becomes impossible in winter and on windy days, and most of the days are windy. The chemistry laboratory is equipped with a small suction fan located in the ceiling which is about thirty feet high. This fan is of little practical value as all heavy fumes remain in the room and soon disseminate to all parts of the building. A fume hood is provided but with no way to cause the fumes to leave, except by a small chimney vent. The temperature is regulated by a control put on the gas furnace and not by what the temperature conditions are in each room. A check on the relative humidity showed that it ranged from 20 to 30 percent which is far below healthful conditions. Because of a lack of proper thermostatic control the temperature conditions vary greatly in the different rooms in the various parts of the building. Such a condition is certainly not in accord with a well coordinated health program. Constant high temperature and a lack of sufficient fresh air causes drowsiness, a lack of attention, and an undue risk of catching cold for the high school students and teachers.

It is recommended that existing conditions be changed to meet a reasonable minimum standard, as to amount of fresh air and temperature control in each room. The most feasible way to accomplish this, in the present building, is to install some form of "univent" ventilating system and to have the radiators in each



room connected directly to a thermostat. A more powerful suction fan should be installed in the chemistry laboratory.

### Utilization of Building

The present utilization of the available space for high school purposes is about 85%. This is comparatively high when considered with the standard for the country as a whole.<sup>57</sup> Twenty two of the twenty five class rooms are in use 5 out of 6 periods each day. The remaining three rooms, the gymnasium, library, and the band room are in use each period as well as before and after school hours. Each teacher has one vacant period a day in which that particular room is not in use for class purposes. With the acquiring of the west wing, now used by the college, six class rooms and office space will become available.

### Industrial Arts Rooms

At present only two years of shop and mechanical drawing as well as home economics are offered due to lack of room. The wood working shop is well equipped to handle about 30 boys at a time. There is no available space for mechanics at present. The mechanical drawing room is very well equipped but should be better lighted. This room accommodates a class of 18 who can work at stationary drawing desks. The Home Economics department is very poorly housed as the cooking room is in the basement of the gymnasium and was originally designed for gymnasium purposes. It has a ceiling of about 30 foot height. The band room occupies the other end of the small gymnasium. The noise from the uninsulated ceiling is very distracting to both these classes and in turn the band causes a disturbance to the gymnasium classes.

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57. Strayer, L.D., and Enselhardt, N.L. Standards for High School Buildings. Bureau of Publications, Teachers College, Columbia University, 1934, p. 17.

The chemistry, Physics and Biology laboratories and lecture rooms as well as the hygiene lecture room are located beneath the auditorium in what used to be the old gymnasium. There is a 25 foot ceiling in each room with very poor lighting and ventilation. These rooms are all long and narrow and as a result the acoustics are very bad, making it hard for the pupils to hear the instructor and vice versa. These ceilings should be lowered and something done to correct the acoustical effects if efficient teaching is to be carried on in these rooms.

### The Gymnasium

The gymnasium is perhaps one of the best arranged and equipped in the state from the standpoint of locker rooms, shower facilities, store and equipment rooms and general floor space. A great deal of remodeling was done during the summer of 1936 to bring this building up to its present excellent condition.

A weather proof and heated shed connects all but about ten feet of space between the gymnasium and the main building. This prevents exposure to those who have become heated during exercising and showering. The halls of the basement have a composition flooring making it noiseless as well as easy to keep clean. Each physical director and the athletic coach have a private office equipped with showers and toilet. Ample store room is provided for athletic and gymnasium equipment. The boys have two large dressing rooms, one for the athletic teams and the other for gymnasium classes. The rooms are provided with lockers and locks and a special basket checking system is used for the Physical Education classes. There is ample shower room with sufficient

light showers and a built in foot bath through which each boy must pass upon entering the shower room. A small room is provided with urinals and toilets.

The girls' locker room is well equipped with lockers and serves as an excellent dressing room. The girls physical education director's office is also located off this room. However, the showers are not well suited to the use for girls. They are all located in one small room which allows the water to run out into the main dressing room causing a rather untidy condition of this room at all times. The showers do not provide for the privacy as is usually desired by girls.

The gymnasium floor space is about 80 feet by 95 feet. A large basketball court is laid out upon it lengthwise and two smaller ones are laid out across the floor. Plenty of light and fresh, warm or cold air is provided. The gymnasium has a seating capacity of about 3,000 people and has two exits from the main floor and two from the balcony, one at either end. The equipment is not quite adequate but more is to be added the coming year so that it will be outstanding from this point.

A special room or health clinic should be installed as there is sufficient room available. This room should consist of an office for the public health nurse containing scales etc., a reception room and a rest room. The portion of the gymnasium now occupied by the band should be made into a small gymnasium suitable for physical education classes especially for such activities as games and school dances and parties. Further discussion of the gymnasium and its facilities will be found in the chapter on Health and Physical Education.

## CHAPTER IX

Health and Physical Education ActivitiesIn the Havre High School

Although the modern school's instructional practices in health and physical education have developed slowly and gradually, from the old academic study of physiology, anatomy, hygiene and formal calisthenics, there is now very little left of the old school of health and physical education practices.<sup>58</sup> The content of these traditional subjects is still taught with the hope that it will improve the hygiene and health habits of the child. Today these health habits are taught in such a manner as to produce a generation of happier and healthier people.

Modern health instruction is designed to develop proper attitudes toward, and to teach correct habits in regard to physical, mental and moral health.<sup>59</sup> Modern health instructors recommend that these health teachings be done directly, as incidental teaching soon leaves health neglected or entirely ignored unless taught by an exceptional teacher. However, incidental health instruction should not be confused with correlation of health with other parts of the curriculum. Such correlation of teaching health can easily be carried on in Science and Social Science courses. This method of correlation,

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58. Brownell, Clifford Lee and Williams, Jesse F. The Administration of Health and Physical Education, W. B. Sanders Company 1934, Chapter VIII

59. Ibid. Chapter VIII

through visual means was carried out between the Biology, General Science and Hygiene classes in the Havre High School during the past year. Such correlations can be justified from the standpoint of economy, integration and effectiveness.

Some trends in health and physical education, as they have been summarized by Brommwell in the National Survey of Secondary Education denote average conditions in the nation.<sup>60</sup> He found that a little more than half the schools of the country have courses of study for health instruction, and in only one-fourth of the schools is there any effort made to measure results of health instruction. Many of these measures used were found to be superficial.

Only a few trends, based on Brommwell's study of the field of physical education, will be given. The trend today in the type of work offered in physical education is away from the calisthenics and formal Swedish gymnastics, and towards seasonal games and free play. Training of physical education teachers is becoming more and more specialized, and with the engaging of well trained teachers, physical education classes have increased in size and numbers. In most schools physical education has been subject to a thorough program of testing to measure outcomes. The physical and recreational activities of students during out-of-school hours are becoming more and more the concern of health and physical education departments.

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60. Brommel, P. Roy, Health and Physical Education. Bulletin 1932, No. 17 National Survey of Secondary Education, Monograph No. 28 Washington, D. C. 1933.

Havre High School has incorporated in its health and physical education program the more advanced trends as stated by Bronnmell. The health directors and public health nurse are trying newer practices and from these activities still more trends may develop. Havre has an exceptional program which ranks high among the better schools in the country, and this fact is all the more noteworthy because of the lack of organized health and physical education programs in Montana.

#### Health in the Public Schools of America

Today there are 245,941 public schools in the U.S. and attending these schools are 26,849,639 pupils who are taught by 1,005,825 teachers. The public schools of this country represent a tremendous investment of over \$8,000,000,000 for property, and another \$2,000,000,000 for teachers and personnel. The parochial addition brings the total school population up to 32,031,549 in the elementary and high schools of the nation.<sup>61</sup>

Such a large investment in dollars and cents to say nothing of the investment in humanity makes the health of the American schools of paramount importance. Naturally one wonders how the health and hygiene of these 32,000,000 pupils are being cared for. Many states require: 1. School medical supervision 2. Health instruction, 3. Physical education.

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<sup>61</sup>. Report; state-wide trends in school hygiene and physical education, circular 7, U.S. Department of Interior, office of education, Washington, D. C. Feb. 1930, pages 2-3.

According to T. F. Rogers; legal requirements for medical inspection, in 1930, was required by statute in 38 states and either permitting or requiring the examination for physical and sometimes mental defects.<sup>62</sup> In 20 states, annual examination of all pupils was required. Two states required that examinations be made every two years, and one state required such an examination every third year. The physician is one of the examiners in 20 states. In one state the teacher or health nurse may be the examiner. Thirty eight states have state physical education requirements. Every state in the Union is required to give alcohol and narcotic instruction, while 40 states require hygiene and physiology and 32 have mandatory physical education instruction.

There are, however, several disadvantages of school controlled health programs and in order to have an efficient health program that puts the health of the child first, these factors must be guarded against. The general school health supervision is usually under a physical education instructor, rather than under a medically trained person as it should be.<sup>63</sup> Then too, the state Department of Education tends to supervise the state health programs instead of letting the State Health Department do the supervising.

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<sup>62</sup> Report; state-wide trends in school hygiene and physical education, circular 7, U. S. Department of Interior, office of education, Washington, D. C. Feb. 1930, pages 4-5.

<sup>63</sup> Ibid. Page 5.

## Physical Education in the High School

A full time physical education program was introduced in the curriculum in the fall of 1936, making physical education a requirement for graduation with one unit of credit being given for successful participation. A full time director of boys physical education was employed as well as a full time director for the girls in the high school. These two directors are to supervise all physical education in the elementary schools in their respective fields, except the junior high school, which has its own boys and girls directors who also teach part time. One day a week is devoted to supervision of the elementary grades physical education program. The boys and girls have been using the same room for hygiene lectures and also the same gymnasium floor. By alternating the periods and days there were no conflicts. However, for the coming year there are to be two gymnasium floors available for physical education work.

The physical education directors work in cooperation with the public health nurse and assist in taking measurements and weights as well as reporting cases requiring the nurses special attention. Each boy and girl in the high school was required to take hygiene and physical education unless excused by a family doctor. Those having such excuses were, however, required to take hygiene one period a week. Seniors who had a schedule so arranged that they could not take physical education without the loss of a study period were also excused.



### Boys' Physical Education

Boys' physical education in the Havre High School is taught by a director who has a major in this field. The classes are fairly large, averaging over fifty boys to the class. In order to facilitate handling such a large group easily and to allow group movement quickly, the first few weeks were spent in teaching marching and kindred tactics. As soon as the boys learned to obey commands quickly and smoothly, handle their bodies more easily, and were able to tell their right and left foot apart, they were divided into squads of about equal number. Each squad was in command of a squad leader chosen from among the group by the members of the class. These squad leaders have one class period before school begins on every Monday and Wednesday. Here the work of a given period is explained to them, and they practice the necessary routines. Special credit is given to these leaders in the form of points which apply toward the earning of a sweater and gym letter. Throughout the year there were 24 squads and leaders.

The squads worked at different games, drills and on pieces of apparatus, so as to allow each group to benefit from the same types of exercise. Throughout the school year special emphasis was given to the seasonal athletic games in which each boy was given training and a chance to gain some healthful exercise by participating.

Those sports which were used as a means of providing the proper muscular activities through play were: volley ball, basketball, handball, ping pong, tennis, boxing, wrestling, fencing and kittenball. Exercises engaged in by means of apparatus work were: tumbling with and without the use of a spring board, work on the parallel bars, work on the horizontal bar, rope climbing and ladder work. The group activities of a more formal nature which included calisthenics, dumb-bell work and general setting-up exercises.

#### Boys' Schedule of Classes

Table 31 shows the arrangement of the class periods and the number of times each class met per week. All class periods are fifty minutes long. Each boy was required to purchase regulation gymnasium suit and to have a thorough examination before he was admitted to class. These examinations were given in school in order to save time. After this initial examination which included measuring and weighing, each boy was enrolled in a class period which corresponded with his study hall period.

**Table 51 showing High School Boys' Physical Education Program**

Period	Monday	Tuesday	Wednesday	Thursday	Friday
8-9A.M.	Boys' leaders class		Boys' practice work		
1	Phy. Ed.		Phy. Ed.		Hygiene
2	Hygiene	Phy. Ed.		Phy. Ed.	
3	Phy. Ed.		Phy. Ed.		Hygiene
4		Phy. Ed.	Hygiene	Phy. Ed.	
5	Phy. Ed.		Phy. Ed.		Hygiene
6	Hygiene	Phy. Ed.		Phy. Ed.	

By consulting Table 51 it can be seen that each class had two days of actual gymnasium work and one period of hygiene each week. The other two days are spent in the study hall.

### Girls' Physical Education

The girls' physical education is taught on a schedule alternating with the boys so that there will be no conflict in the use of the gymnasium. As was stated in the preceding chapter, the girls have a complete locker and shower room. The girls' physical education teacher is a full time teacher in the high school and is supervisor of the elementary grade girls' physical education program. She has a major in physical education work. The order of class work was taken up in the following manner. First, marching was taught to develop

grace, physical and mental coordination. After about three weeks of marching and other drill work the girls were divided into squads on a weight basis. These squads chose their own leaders who were to assist in directing the activities of the group. Special credit points were awarded to each group leader to apply toward the earning of a pin or a letter.

Volleyball, basketball and speedball were games played in the gymnasium during the fall and winter months, with kittenball being played outdoors in the spring. Apparatus work on the bars, horses, and spring board was stressed for about a month. At the culmination of this apparatus and tumbling work a demonstration was put on by the girls for their mothers. Later in the year the girls and boys combined with representatives of each elementary school and put on a free public demonstration. Tournaments were held in volleyball and basketball with several teams from each class period playing each other until a period champion was determined. These class period champions then met in a single elimination tournament with the other champions from the remaining five periods until a final champion was determined. Ping pong was also played, but no regular tournament was run off.

Folk dancing, clogg and tap dancing were engaged in by those who wanted to take part in these activities. Once each week a free play period was granted to each class. During this period each girl chose for herself what she wanted to do.

No rule was set in governing the activity except that each girl must actively take part in some group.

The girls were weighed and examined in the fall by a doctor and nurse and each month thereafter were weighed by the girls' physical education instructor. They were again weighed and measured by the nurse during the months of February and May.

Table 52. Girls Physical Education Schedule

Period	Monday	Tuesday	Wednesday	Thursday	Friday
8-9		Leaders class		Practice work	
1	Hygiene	Phy. Ed.		Phy. Ed.	
2	Phy. Ed.				Hygiene
3		Phy. Ed.	Hygiene	Phy. Ed.	
4	Phy. Ed.		Phy. Ed.		Hygiene
5	Hygiene	Ph. Ed.		Phy. Ed.	
6	Phy. Ed.		Phy. Ed.		Hygiene

One night a week after school was devoted to special games for those who wanted to participate.

### Health Education in the High School

The health education of the high school is directly in charge of a public health nurse who supervises the physical education directors in teaching of hygiene.

A public health nurse differs from a practicing nurse in that in addition to the three years of nurses training, a course is given in public health nursing and administrative training. Her work involves a close relationship between parent, teacher and child. She must work with the health officers, physicians and dentist, state institutions, sanitarium, etc. Another one of her duties was the teaching of public health nursing to the student nurses of both hospitals. A crippled children's clinic was conducted in five counties under the supervision of the state department. Red Cross first aid and home hygiene was taught and in this connection a "well baby" clinic was held. By far her most important work was to help control and prevent, through education, the communicable diseases. During an outbreak of an epidemic of scarlet fever in the W. P. A. nursery school she was called in to help prevent the spread of this disease.

#### The Health Program at Work

Most of the nurse's time is devoted to the six elementary schools in the city and among the five rural schools. Much remains to be done before the health program will operate effectively as a great deal of time and energy was spent this year in getting the program started.

A thorough lung and heart examination was given each boy and girl in the high school during the first month of school. Eight cases requiring special attention of the physician were

located and in each case a letter was written to the parents informing them of this condition. A follow-up check is being made this spring to see whether or not the proper treatments were given.

A card index system is used for a health record of each student. This information concerning the health record was gathered by the advisory room teachers through questionnaires sent to the parents. A list of all communicable diseases, dates of vaccinations and inoculations, and chronic ailments were recorded. The use of posture charts during the examination helped many to correct their faulty posture.

### Hygiene Classes

Health was taught through the medium of the hygiene classes which were taught by the boys' and girls' physical education instructors. A test, "For More Healthful Living", was used throughout the year in this class. Lectures by health authorities and appropriate moving pictures were also used to teach personal health. Three lectures, by as many different doctors, were given to the boys and to the girls on venereal diseases. A health guidance test was given to 226 boys with the following results.

<u>Class period</u>	<u>Median</u>	<u>Class period</u>	<u>Median</u>
First	92	Fourth	83
Second	89	Fifth	93
Third	87	Sixth	91

The average median score for the six classes was 89 which is quite high. These tests as well as tests based upon the lectures and moving pictures were given to check the amount of retention and to test the thoroughness of the instruction given.

### Health Bulletins

Each teacher in the system receives a monthly health bulletin issued by the Metropolitan Life Insurance Company. These bulletins serve as a text for the teachers to be used in teaching health and safety to the students. Many timely and helpful subjects, pertaining to the home, school, and community were discussed in these bulletins. The Metropolitan Company has been very generous in supplying the nurse with literature upon the subject of health and safety. A series of five bulletins entitled "Health Heroes", were used by the high school English classes as material for classroom talks upon the subject of health. The five bulletins so used were; Robert Koch, Louis Pastuer, Florence Nightingale, Walter Reed, and Edward Livingston Trudeau. These bulletins dealt with the lives of these pioneers in public health and their contributions to humanity.

At the beginning of the school year a bulletin was sent out by the nurse to each teacher explaining the health program, giving instructions, and asking for the full cooperation of the entire staff. Each time a student is absent for three



or more days he must secure a permit from the family physician or the health nurse before he can re-enter school. This procedure was required in order to prevent the return of anyone who had a communicable disease or who had been exposed to it. The public health laws of Montana give the teachers and principals the right to exclude a pupil from school upon the suspicion of any communicable disease.

A medicine cabinet was furnished to each school and to each department having a special need for one. Special attention was given to the condition and care of the teeth with the result that many visited the dentist who otherwise would not have done so soon enough. Much remains to be done in the way of health education and practices in the Havre High School. However, it is the plan of the health nurse to stress the health program in the grades so that by the time the young people reach high school, little time will have to be devoted to the high school students except for the customary routine checking, measuring and weighing. And extensive use of posters throughout the high was one way of keeping the vital question of health constantly before the students.

Special attention was given to the detection and prevention of tuberculosis among the high school students. One very bad case was found and the pupil was withdrawn from school and sent to a sanitarium for treatment. Two sets of tuberculosis pamphlets were distributed among the homes of the students.

One hundred eighty copies of a pamphlet entitled, "In Every Home," and one hundred fifty pamphlets of "It Can Happen," were used in this educational campaign.

### Summary

Much preparation, correspondence, and the approval of medical and supervisory authorities must be attained before any efficient form of health program can be alunched in a school system. Education and confidence must be instilled in a community, and to accomplish this a great deal of foresight is necessary. Confidence and interest are hard to gain, easily lost, and difficult to regain once lost, hence the introduction of a health program into a community for the first time is a slow and difficult task.

The accomplishments of the first year of health education and safety in the Havre High School are: Examination of all students and teachers, with eight student heart or lung defects found, notification of parents and follow up work on each case, conducting of a cripple children's clinic, examination for communicable diseases, periodic weighing and measuring, and a series of lectures to the parents and students upon the matter pertaining to public and personal health. In spite of all that has been or can be accomplished by the public health nurse much of the health work still remains one of the primary duties and functions of the home and of the family physician.

### Some Objectives for the Health Program

A course of corrective exercise is needed for both boys and girls. At present there is no one qualified to handle such work in the high school. However, both the physical education instructors are attending summer school to take special work in this field. Quarters for the nurse and health staff are badly needed in the high school building. More promptness is needed in filling out reports and data requested by the nurse. With a little more time to get the program organized and working and with further education of the community to public health, it is felt that Havre will have one of the outstanding health and physical education programs in the northwest. This is especially commendable since Montana is considerably behind other states in this phase of its educational program.

CHAPTER X  
Recommendations

In making the following recommendations the needs of the schools, as determined by the findings of the survey, are considered in the order that they appear in the body of the survey. The recommendations made are based upon the ability of the district to meet these needs.

1. The extra-curricular program is in need of reorganization so that participation can be controlled and better supervised.
2. Some provision should be made for more scientific educational and vocational guidance.
3. More adequate provisions should be made for financial assistance to the music department.
4. The library is in need of equipment for filing purposes and steps should be taken to bring the natural lighting up to what is considered standard. Noiseless floor coverings should also be provided.
5. The books and periodicals should be checked with a standard list for libraries in schools of a comparable size and additions be provided according to the needs of the school and the ability to provide these needs.
6. A testing program, based upon current standards, should be introduced into the high school.
7. The results of the tests already given should be used

by the teachers and principal in dealing with individual differences among the members of the various classes.

8. A more adequate salary schedule should be adopted based upon education and experience.

9. The Visual-Radio should be coordinated with all the departments in the high school. The responsibility for this program should be delegated to a qualified teacher.

10. Provision for more and better supervision should be made other than that now being done by means of the public address system.

11. Revision of the arrangement of the administration offices should be brought about by the acquisition of the remaining part of the school building now being used by the Northern Montana College.

12. More revenue should be provided in order that the school may continue the progress already made.

13. The lighting and ventilation systems need immediate attention so as not to affect the health of the teachers and students.

14. The small gymnasium should be remodeled to provide the necessary room for conducting the physical education program.

15. Provision should be made for the introduction of corrective exercises in the physical education classes.

16. A fireproof vault or safe should be installed which will be large enough to hold all current and future high school record cards and books.

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## APPENDIX.

## Questionnaires:

In order to get some information concerning the social and economic background of the school population, we would like to have the pupils fill out the following blank. Some will have to take them home. They do not need to be signed, or any names used. Please return to the office by Friday.

Occupation of father ( ). Occupation of mother, if working outside the home ( ). Nationality of father ( ). Nationality of mother ( ). Is your father a member of a lodge or other fraternal organization ( ). Is your mother a member of a lodge or club ( ). Are you a member of a church ( ). Do you belong to any lodge, club or other organization; such as, DeMolay, C.Y.C., Rainbow, C.D.A., and etc.? ( ). How long have your parents lived in or near Havre? ( ) years. Check the following: Education of father:- 8th. grade ( ), high school ( ), College ( ). Education of mother:- 8th. grade ( ), high school ( ), College ( ). Do your parents own their own home?

## To Teachers:

In order to get some information regarding the teachers in the Havre High School, I would like to have you fill in the following questionnaire. Signed Supt. \_\_\_\_\_.

Name: \_\_\_\_\_

Certificate: Secondary State ( ), Secondary Life ( ).

Degrees held: \_\_\_\_\_.

Years of training beyond high school. (three summers equal one year) ( ).

Years of experience: ( ).

Years of experience in Havre including the present term? ( ).

Cost of board and room per month, if married cost of family. ( \$ )

Did you attend summer school during 1935 ( ), 1936? ( ).

Would you select teaching if you were to start over? ( ).

Number of School days lost during 1935-36. ( ).

## To Students:

Please fill in the following information:

Class: ( ). Boy ( ), Girl ( ). Hours per week spent in the library. ( ). What activities do you take part in? List ..... Do you intend to finish high school? ( ). Do you intend to go to college? ( ). What do your parents wish you to do upon graduation from high school or college? ( ). What do you want to do upon graduation? ( ). What is your favorite subject? ( ). What subject do you dislike the most? ( ).

appendix (cont.)

To teachers:

In order to get some idea as to what it costs a teacher to live would you please fill out the following questionnaire. You need not sign your name unless you wish.

Married Man ( ), Single Man ( ), Woman ( ).

Average amount spent for food for a twelve month period. ( )

X	"	"	" housing or rent ( ).
"	"	"	" Laundry ( ).
"	"	"	" clothing ( ).
"	"	"	" health and care of person ( ).
"	"	"	" transportation, auto expense. ( ).
"	"	"	" recreation and entertainment ( ).
"	"	"	" summer school for the past five years?
"	"	"	" other professional improvement (magazine, books, extension training, for the past five years. ( ).
"	"	"	" education and culture, music, travel and etc. ( ).
"	"	"	" Insurance ( ).
"	"	"	" Savings ( ).
"	"	"	" miscellaneous expenses ( ).